

PARISIAN SCAVENGERS.

ANOTHER French Fashion Plate! These dames look as if they were in *public* employment. How much of their precious time do they spend in vain conversation: thus giving to pleasure what might promote the public good! And yet their pleasure is a part of the good which the pub-

lic ought to prize highly! We will not by long moral reflections weary the reader, or detain him from the very spirited drawing of Mr. Crockett, rendered with equal force by Mr. Brain's graver.

From The Evening Post.

MOSSES.

In this lone spot of weedy mould,  
Watched by no sad, regretful eyes,  
Mid matted herbage damp and cold,  
An old forgotten grave-stone lies.

A brier's thorny fingers keep  
Each piece of broken slab apart,  
And ancient mosses darkly sleep  
On all its wealth of lettered art.

Here once were graven names and dates,  
Affections, titles, triumphs, trust;  
All that memorial Love relates  
To grace the mute abandoned dust.

Beneath each green oblivious lid  
What treasures of sorrow lie,  
In cankered rust forever hid,  
While all the great world jostles by;

I linger, though the night is drear,  
And each cloud shoots a fiery dart;  
For sympathy begets no fear,  
And moss is heavy on my heart!

The briers of anguish pierce and fold  
Each broken trust, and many a weed  
Chokes up the warm and generous mould,  
Where I had planted golden seed.

How many tender records, traced  
In flowry rhyme on scrolls of white,  
Sweet names with gilded wreaths encased,  
There moulder, buried from the sight.

And o'er Joy's empty fountain trail  
Dead lilies, spreading suppliant palms,  
And withered passion-flowers, pale  
With pleading for affection's alms.

O, down these moss-grown ruins rest  
Sealed treasures of hope and tears;  
There Love folds on its bloodless breast  
The cold dreams of departed years.

There Memory o'er the falsely fair  
Sleeps with her web across her eyes,

And Fancy, palsied with despair,  
Waves no bright pinion in the skies.

O Heart! a bitter wealth ye keep,  
While round life's rosy currents flow;  
But bury thy pale orphans deep,  
And still smile on, for none shall know.

H. N. POWERS.

From the Journal of Commerce.  
STUART HOLLAND.

BY WILLIAM ROSS WALLACE.

"Amidst all the terrible incidents attendant upon the destruction of the Arctic, which we have been receiving these two days past, there is one that impresses us with a feeling of awe and admiration, and shows all the world that the age of heroes is not altogether gone by. We refer to the young man, STUART HOLLAND, whose post of duty throughout all that trying scene was the firing off a signal gun, at intervals, in the hope of attracting the attention of vessels from a distance to the scene of the disaster. While all around him were death and despair, in bold relief there he stood, (like hope herself,) with the calm determination of a true hero, discharging gun after gun, until the gallant ship went down beneath the waves. Hero was a courage and manliness—a defiance of death, and an adhesion to duty, we might walk over the most famous battle fields in history to look for and not find. *He was in the very act of firing as the vessel disappeared below the waters.*"

Flag of the Brave! take newer light  
On every stripe and flowing fold  
That Symbol freedom's radiant might  
In their deep heaven of stars unrolled.  
O, not in vain our martyrs sighed—  
And not in vain our heroes cried,  
'Tis sweet for one's own land to die!  
The Soul of yore, the Soul that gave  
Their glory to our soil and wave,  
From Vernon's Mount and Ashland's grave  
Still lightens through the sky!

Death on the waters! hark! the cry  
Of hundreds in their agony  
Who, helpless, crowd the deck;  
There manhood sternly marks his tomb,  
And woman wails amid the gloom,  
As slowly sinks the wreck.

But who is he that calmly stands,  
The lighted brand within his hands  
Beside the minute gun!—  
What quiet grandeur in his air—  
His right arm raised—his forehead bare  
Amid the cannon's quivering glare  
And mist—wreaths rolling dun!  
"Save, save thyself!" the Captain cried—  
"The craven crew have left our side—  
I go where goes my glorious bride,  
My own majestic bark.  
But thou art free—thy mother waits  
Her son beside the cottage gates!"  
How answered Holland?—hark!  
His minute gun again—and by  
The flash that lights the sea and sky,  
Behold the hero's form,  
Grand as a young Greek God who smiles  
When shake the proud Olympian piles,  
And quiver all the misty isles  
Beneath the booted storm!

In vain, in vain the loud gun roars—  
No more for him the calm green shores—  
For him no more the home:  
But still undaunted there he stands,  
The lighted brand within his hands,  
Above the wild white foam.  
See! see! the vessel reels—a cry  
Of shivering horror rends the sky—  
O, God! can no one save?  
The proud ship sinks—and sinks—again  
The cannon thunders to the main—  
They naught but mist and wave  
Where but a few brief hours ago  
The rider of the billows bore  
In pride four hundred joyous souls  
To an expectant shore!

Soul of the Brave! when sounds the tromp  
Mid red-browed Battle's glorious pomp,  
And rolling drum and thrilling fife  
Lead on the dark and desperate strife,  
While gorgeous banners rise and fall  
Majestic o'er the soldier's pall,  
And eager nations turn their eyes  
Upon the Hero's sacrifice—  
O, 'tis not then, it is not there,  
With gory blade and vengeful air,  
The grandest wreath is thine:  
'Tis when with calm, untrebling breath  
The Hero, smiling, faces Death  
Upon the land or brine,  
And knowing not if e'er his name  
Shall murmur from the harp of Fame,  
But looking from a troubled zone  
To God, and to his God alone!  
Brave HOLLAND! such a wreath is thine,  
And millions shall rejoice that they  
May build to thee a glorious shrine,  
And round it deathless laurel twine,  
Nor let thy memory fade away—  
For still, despite of reeling deck,  
The yawning wave, the sinking wreck,  
The record of thy deed remains,  
Stamped on the Pyramid that Time  
For hero-souls of every clime,  
Has reared on Glory's plains.

O, Dweller of the crag and cloud,  
Wave wider, wider yet thy wing!  
Roll back, roll back the tempest's shroud,  
And brood above the thunder's spring:  
A newer splendor lights thy plume,  
And fresher vigor nerves thy flight  
Amid the South's soft, sunny bloom,  
Or through the Norland's wintry night  
'Twas not in vain our Martyrs' sighed—  
And not in vain our Heroes cried,  
'Tis sweet for one's own land to die!  
The soul of yore, the Soul that gave  
Their glory to our soil and wave,  
From VERNON's mount and Ashland's grave  
Still lightens through the sky!  
New York, Oct., 1854.

## WHAT MAY BE OURS.

THOU that dost pine, indeed,  
For wealth more precious than rich gems or  
gold,  
Learn how to seek it ere thy heart grows cold;  
And take this for thy creed;—  
Not who love us, but whom we love are ours.  
So shalt thou know thy yet undreamed of pow-  
ers.  
Be thine no doubting mind;  
More than thine eager hands can grasp,  
More than thine outstretched arms can clasp,  
Thou needest, and shalt find.  
Thy treasure shall be countless and unknown;  
For, all it loves, the heart doth make its own.

Thou shalt break off the chains  
That bind thee to the present; for, though  
Time,  
Between us and his elder-born, uprears,  
Like a huge bulwark, days and months and  
years,  
The bond of brotherhood remains;  
And o'er that towering wall we, if we will, can  
climb.  
Thus, more than those who share  
With thee the gentle air,  
Shall yield to the strong magic of the spell  
That lies in love, and in thy heart shall dwell.

And distance shall not limit thy deep love,  
If from the human flowers that flourish there  
Some wanderer chance, like Noah's gentle dove,  
To thee a token of their bloom to bear.  
Far-off their home may be,  
Beneath the glory of an eastern sky,  
Or where bright isles amid blue waters lie  
And thou may'st never see  
The forms that are their spirits' earthly shrine,  
But oh! if thou canst love them, they are thine.  
Yes! thine to joy in, thine to prize,  
To weep for—if dark years  
Should dim the light that on them lies—  
But they are worth thy tears!  
And as within thy heart thy treasure grows,  
Think whence all good, all truth, all beauty flows;  
For Love, th' adoptive spirit, was not given  
To find all wealth on earth, and seek for none in  
heaven.—*Household Words.*

From Chambers's Journal.

### AN ALMS-HOUSE IN SHROPSHIRE.

ONE day last autumn, after fifteen months' arduous and incessant literary duty, I gladly for a time turned my face from London. My destination was to one of the western shires, there to perform an act of pious duty in a charitable foundation, said to be placed amidst the solitude of a wild moorland scene. I had rather a humble idea of what I had to behold, arising from a depressing conception of the meaning of the word "charitable," but the object of my journey rendered it of little consequence to me whether the place should prove a palace or a hovel!

At the early hour I started, it was cold and rainy; but I was too much delighted with my hard-earned holiday to be affected by disagreeables of a small kind. They proved, however, numerous enough to put the question of patience to the test, for instead of four, in the afternoon, it was nine at night when I reached the little town to which I was destined. This I found to be full of forge fires, smoke, colliers.

I had yet four miles to go through a wild country, and the night extremely dark; but placing myself and treasures in a fly, I soon set forth again into the wildness of the night, for intensely wild and keen blew that autumn wind; so much so, that had I been set down blindfolded on the spot, I could have told that either a great open tract of country, or the sea, lay near at hand.

Though the highway was little more than a succession of rugged and narrow country lanes, its hedge-rows could be scarcely seen. Sometimes these were still more shadowed by the overarching trees of park or field; sometimes the stacks of the new harvest scratched against the windows of the vehicle, or cast a yellow gleam within; sometimes I breathed the unrivalled odor of that season's hay; at others I caught pleasant glimpses of fire and candle-light in farmhouse and cottage; sometimes of the flitting lantern-light, far away in solitary sheilings. But on the other hand, and seen the more intensely for the pitchy night, ran that marvellous backbone of Staffordshire and Shropshire, lurid with countless heaps of coke and ironstone burning in its first process, as well as with blast-furnaces belching forth their flames like as many Heclas. This is, in reality, a wonderful sight; the more so when we recollect that the first Levison was "ill-content" with William the Norman for this "poor moorland fee." But time changes material values as well as men; and here this mighty creation of riches will proceed, as far as iron is concerned, perhaps for countless ages yet to come; and as respects coal, till new changes

arise, and science has eliminated out of nature the secret of a new combustive power.

At length the vehicle stopped before a park-like gate, painted white, and opening between two lodges prettily overhung with hollies and other shrubs. The driver then led his horse up a short avenue of elms, and stopped at other gates, lofty, and of beautiful wrought iron. Here stood my dear relative, as well as the handsome old serving-man of the building, and I was led—yes, led is the word, for I was still a child in the heart of the aged alms-woman—up the flagged side-path of a shaven lawn, and into a lengthened cloister; and such a cloister as few except more ambitious collegiate buildings can at this day show. Here were some attendants with lanterns, but the richest and warmest light fell far and wide upon the cloistered pavement through an open door. To this I was taken; and a little scene was before my delighted eyes that, for its air of comfort—I might almost say opulence—it's excessive quaintness, its sense of holy, nay, as it impressed me, its religious peace, will never fade from me while life remains. Perhaps I was a partial looker-on, perhaps I might be influenced by the mingled and many-colored feelings of that night; but though I remained there six months, this first impression was neither dissipated nor changed; on the contrary, only intensified and mellowed. I would, indeed, that one of our best painters could have seen that room that night; it was, indeed, a worthy scene, with its blended lights and shadows, for the richest ministration of art. I was at Preston Hospital, in Shropshire; my aged relative was an alms-woman—I was in her quaint home.

As soon as the door was closed, and I had thrown off cloak and bonnet, and drawn a quaint high-backed chair to the fire, I had time to look about me. The first brave thing was the fire itself—a mass so full of sparkling life as to light all but the distant corners of the room, like a jet of gas, and, by its bounty, enough to astonish a Londoner. But it is only in coal counties that you see such fires; and yet there was need of it, for the room was large and very lofty, and its pavement, stone, though warmly carpeted throughout. The walls, newly and tastefully papered, were in thickness much like those of the keep of a Norman castle, and gave comforting assurance of warmth and protection when winter winds and snow should sweep across the moor. Opposite to the door, opening, as I have said, so picturesquely from the cloister, was a large and antique window running up nearly to the ceiling; across this swept a handsome curtain, as tastefully hung as in a drawing-room; and in the wall opposite to the fire place, was the ample bed-place or recess, so often seen in Scotland and on the continent. It was slightly

raised above the floor, and across it was likewise drawn a curtain—the only thing that rather grated on my sight, and gave an alms-house air to the otherwise handsome room. On either side the fireplace was a large closet, the one on the side nearest the window having a corresponding casement, and serving as pantry and china-closet. Such, in addition to a small garden-plot, constitutes the domicile of each alms-woman. But the differing taste in embellishment, and the possession of numerous relics of by-gone days, make the seven and twenty homes in Preston Hospital strangely various, as I in good time saw.

Here great natural good taste, a love for decoration, the descended culture of an old race; extreme cleanliness, and carefully preserved means, had done all that was possible to make it a bright and pleasant home. Old china, cups and vases, graced the mantle-piece; above these hung portraits of children long dead or far away—one a miniature on ivory, painted by a French abbé in Dartmoor Prison, many years before. Then there was "Dick" roosting in his cage; a cluster of pretty modern bookshelves, bearing a few cherished relics of a once rich library—the top shelf being crowned with rare old china—and a little antique silver urn of exquisite beauty. Then, spread about the room, were chairs of varied shapes, a capacious sofa, differently shaped tables too—one in its brightness shining like a mirror, another bearing on it the old family Bibles and their parchment scrolls.

So much for decoration. But a little table was now drawn cosily to the hearth. On this was spread a snowy cloth, country bread, butter, cream, cold roast beef, and steaming tea; and I in my old-fashioned high-backed chair, and my aged alms-woman in her pleasant easy one, sat fairly down to rest and talk. Both were necessities: we had not met for seventeen years; in that time the cherished living had become the reverenced dead, and, like myself, my aged alms-woman was worn out with unusual fatigue—she having waited for me in the little country town all day, only giving up my arrival as night closed in, and it was time to return home.

It was twelve o'clock before we retired to rest, and I lay long awake, wondering at the quaintness of my new home, and its solemn and monastic stillness; unbroken by a sound save the occasional baying of a watch-dog on a neighboring farm, and the old belfry-clock as it tolled the hours. Even I, with my imperfect hearing, could note this last, as it multiplied its slow, sweet echoes in gallery, cloister, and room, and then swept out upon the wind to moorland wastes and hills. Then I called to mind that this noble charity was founded in 1725, or thereabouts, by a Lady Herbert—of

that old race, undoubtedly, which had been prolific of so many noble men; two brothers of them, though at the antipodes of human opinion, having names illustrious in English letters; the one Lord Herbert of Cherbury, born—contrary to the ordinary accounts—in this neighborhood; the other, the "sweet George Herbert," who, with all his outrageous quaintness and incipient Puseyism, was not only a true poet, but the possessor of an exquisite human heart. His little poem, *Man is all Symmetry*, has unrivalled philosophic depth and beauty—a perfect gem, whose true meaning awaits the appreciation of a greater age of physiological knowledge and medicine than our own; and whose life—one of those old Walton "writ with an angel's pen"—will always present a charm for English readers, though they wisely smile at the old fisherman's occasional disputations against Puritanism, and what Lord Clarendon styled the "Great Rebellion." Then I went on thinking of the mother of these men, who, born at High Arcull, in this neighborhood, bore the half-poetic maiden name of Magdalen Newport. Then I was led on to ponder upon benevolence as a human characteristic—of its self-multiplying effects—of its magnificent power of nobly influencing remote causes—of its pre-eminence abstractedly considered as a virtue in alliance with human progression—of its being, under its higher aspects, the invariable accompaniment of the most perfectly organized and developed natures; and so, reaching my favorite class of speculations, I fell asleep.

The morrow rose, a brilliant September morning—rich in sun and the exquisite perfume of mignonette from the neighboring gardens. I rose betimes—for primitively early hours are the fashion here—and went out into the cloister, which was warmed and glowing with the rich young beauty of the day. I then saw that this large building formed three sides of an extensive square—a hall, ascended to by a flight of handsome steps, and used both as a chapel and school, occupying the upper portion; cloisters, with wide galleries and rooms above, forming either side; and from these, short wings, more recently added, branched out. The intermediate square, as I had seen the night before, was laid with a rich sweep of turf—as was the case in all the old conventional buildings—with flagged paths across it, the whole being bounded by the pallisading and iron gates referred to, and which divided it from the outer lawn and avenue. The cloister opposite the one I now paced, exactly resembled it, with a similarly wide staircase to the fine gallery above and its diverging rooms, and a passage through to the old gentlewomen's plots of garden; everything was alike, with this exception, that here the school-house and matron's dwelling occupied the angle. To

add to the privacy, only doors open into these cloisters—all the windows, except those of the galleries above, looking towards the garden.

In addition to the original endowment by this Lady Herbert—who had the building imitated from that of a monastery in which she had been hospitably sheltered in the Tyrolean Alps, other noble donors augmented the charity from time to time; so that, at the present date, it is said to be an immensely rich one. Its farms and lands are spread far and wide about the neighborhood, and are eagerly competed for by occupiers, who seem to be a thriving class; though little can be said for their education, their courtesy to the recipients of the charity, or their style of farming—many essentials of which, as the condition of their fences, gates, and roads, would put Lord Ducie and Mr. Mechi in a fever.

The original endowment of the charity was for the support of twenty decayed widows, and the maintenance and education of twenty poor girls between the ages of ten and sixteen years, and destined to be brought up as domestic servants. Spinsters are now eligible to the charity as well as widows; and the class of recipients seems to have been raised, till it now embraces the widows and daughters of clergymen, surgeons, landed proprietors, and others of the educated middle classes. The further this proceeds, the better; educated poverty is peculiarly deserving of compassion; and the more homogeneity of feeling, education, and tastes brought together in an institution of the kind, the better for all concerned; for no differences separate more widely or so effectually as those arising from education.

The charity is rather a private than a public one, though controlled by Chancery; the patronage being vested by the original donors in the Earls of Bradford. But all appointments are irreversible, except for flagrant misconduct; and it says much for the *morale* of a long line of old gentlewomen, that in a century and a quarter, there has not been more than one or two expulsions. Candidates are not eligible for admission till the age of sixty. Many thus go in merely to die, though others enjoy a green old age for some twenty or thirty years. One charming feature cannot be too highly praised, as it is a somewhat rare one in institutions of the kind—there exists no badge or distinctive mark of charity. In dress, in the reception or stay of guests, in absence from or return home, there is unconditioned liberty.

The only points necessary for admission, in addition to that of age, are, that each candidate be of the Church of England, and that she deposit the sum of £10 in the savings-bank of the neighboring town, as a contingent against any extraordinary medical expenses. The depositor may draw the interest, or let it accu-

mulate; and the whole may be willed away, or passed by heirship. The charity now supports twenty-seven old ladies, each of whom has two tons of coal yearly, and a home, such as I have described, furnished by herself. In addition, twenty receive £18 per annum, and the remaining seven £26—this larger stipend passing, by seniority of admission, to the rest as death makes vacancies. The sum of £5 is also allowed for the burial-expenses of each inmate. With the exception of general supervision and assistance in case of sickness, the duty of the matron, who is also schoolmistress, is confined to a monthly visit to each room; but these are so charmingly managed as to lose, in the majority of cases, all air of official duty. The loan of a book or newspaper, a friendly chat, or a neighborly service, hide the formal duty; and, in our case, these periodical visitations were among the most delightful episodes of my winter-evenings.

As for myself, I was most fortunate. Though not intending to make a long stay, I had brought my work, and was rejoiced to find a study. The next cloistered home to ours being vacant, owing to the permanent absence of the owner, it was most kindly given up to my sole use; and here, by half-past eight or so in the morning, one of the little incipient school-maids, in cap, bib, and apron, had lighted me a brilliant fire, and soon after I was cheerfully at work, my open casement—as long as weather permitted—admitting many tiny friends, in the shape of robin and sparrow. True, I had not many household effects—two tables, three chairs, a footstool, and a poker, comprised my worldly stores; but I was “monarch of all I surveyed;” had stillness, light, and warmth, and my beloved books—what would I more? As time wore on, one of my feathered visitants grew very tame, ceased to mind the rustle of book-leaves or pen, brought his pretty red breast quite close to show me, and would have perched upon my shoulder, had I remained long enough, I am sure. At half-past twelve, I locked up my study; had a saunter in our sunny cloister or in the fields; then dined, then rested, then had a two hours’ walk far away amidst the wildness of the moors, the autumnal beauty of the woodlands, or beside the winding way of crystal brooks. At five o’clock, I returned; paid duty to the toilet; had tea, at six o’clock, went steadily to work beside our own hearth, my aged alms-woman sitting opposite stilly at needle-work, with ‘spectacles on nose.’ As the belfry-clock struck nine, I put by; then came supper; a chat—bed. Thus the peaceful days flew on.

As they did so, my enjoyment of our cloister grew greater and greater. From it I had a fine view of that celebrity of Shropshire—the Wrekin; beyond it, that range of desolate

hills, so exquisitely mentioned by Sir Roderick Murchison in his great work the *Silurian System*; and at night — dark ones especially — I had all the Etna-like wonders of the Lea-Priory Forge — one of the greatest blast-furnaces in the world. But the sun-sets were the loveliest, when strips of golden glory fell across the shadowed floor. Then slowly pacing up and down, the hope was constantly mine, that, should any self-sustained endowment or college be founded for the literary class, its building might have cloisters. The idiosyncrasies attending the higher kinds of mental toil must ever be the same, and the cloister be as much a contemplative luxury to the true workers and thinkers out of an advanced human knowledge, as to a Roger Bacon or to Wycliffe, and those other large-brained monks, whose meditations on the corruption around them must have been an effective, if indirect, agent towards the liberation of human thought. For in this case, as in all others, the corrective power sprung up from within the boundary of the evils which awaited reformation.

Intent upon lesser things, but most peaceful and pleasant in their way, these good old gentlewomen much enjoyed their cloisters, the one opposite to ours especially. Here, on fine days, they might be seen chatting, or sauntering, or visiting each other in their quaint homes. No sign of fine weather was more sure than to see our opposite cloister populous; for just as in the 'weather-houses' of children, if the least cold or damp prevailed, their green doors were hermetically closed; if fine, these latter stood open, affording pretty glimpses of interiors: deep casement ledges filled with plants; snowy caps and bright silk gowns; and, if the belfry-clock had struck four, tea-tables and pleasant occupants. Considering that even the larger stipend is not 'infinite riches,' these old gentlewomen might teach a lesson in economy to many a wiser person. Almost all of them dress well; some support a daughter or grandchild; others lay by money; and almost all their homes have an air of well-doing and comfort. It is only a pity that a large institution of the kind was founded in such an out-of-the-way spot. At the time the hospital was built, the country around was to a great extent a huge morass, and the climate in winter must have been inclement in the extreme. In this respect it has not much to boast of even now; though drainage, enclosure, improved farming, canal cutting, and a recent railway have effected wonders. In the neighborhood of the county town were lovely sites; and an institution of the kind raised on some green declivity of the Severn, would have had by this time an island fame. As it is, its isolation brings many disadvantages, not only as respects the laying out

of individual incomes, but that social intercourse, so beneficial to all, but especially to the aged.

The children are well fed, and kindly treated, and behave with great respect to the old ladies. Twice a year — at midsummer and at Christmas — the latter dine together, appearing in great state of blond caps and silk dresses. Every few months, Lord and Lady Bradford, accompanied occasionally by their daughters or other visitors, drive over, stay a few hours, and make a kindly call of inquiry on each old gentlewoman: this without ostentation or intrusiveness, but with that suavity and simple kindness of manner which belong in so remarkable a degree to the better part of our English aristocracy.

As autumn waned into winter, my time passed very happily in my antique room: I only kept my fire the brighter as the days grew colder; made myself a screen by hanging an old carpet on some chairs at my back; and kept the casement shut, to the evident wonder of my little red-breasted friend. But occasionally I admitted him, treated him with some crumbs, let him stay with me for hours when the weather grew very cold; whereupon he learned to perch himself upon the mantelpiece above me, watch my moving pen, and chirp if I looked up at him. One thing comforted me with respect to Mr. Robin: when deep snows came, he was not a starved-out householder, but lived with Mrs. Robin in a huge wheat-stack I could see from my window, where he had always a well-stored larder.

By the time Christmas came, I had resolved to stay till spring, as my presence was not yet needed in town. So I bought a pair of ponderous leather-boots, with which to traverse the deep mud of the surrounding lanes and roads, and the morass-like places I occasionally encountered in my voyages of discovery, and settled myself down to make the best of my quaint home, and the austere winter which gathered around it. Christmas brought the systematic cleaning of the great building from end to end; and after this came the school holidays. Such rubbing and scrubbing as there was, few can conceive. The tessellated marble floor of the hall underwent entire purgation; its quaint stools and forms were piled together in a huge heap on the lawn; the agent's rooms, the matron's rooms, the dormitories, the fine old kitchen, with its service of pewter-plates and dishes, the galleries, the cloisters, were all besieged by some six or seven little housemaids, in mobcaps and checkered bedgowns, such as our great-grandmothers wore. The cleaning of the pewter, which takes place only once a year, is the most important affair of all. It has to be boiled, scoured, and rubbed — making altogether an elaborate process. But the reward comes

when set on its oaken dresser, with holly between, and it shines like silver. Yet beautiful as it looked, as it scintillated in the blaze of the great Christmas fires, it is wisely kept for show; and we can but rejoice that the improvements introduced by Wedgwood's genius and science, have superseded all this intolerable drudgery of our grandmothers, and given us platters at once cheap and easily cleansed. As for our cloister, it was like a place in a state of siege, with chairs, tables, carpets, and other wonders of the old ladies' homes. Happily for me, I was left at peace in the shadows of my little study.

Snow had begun to fall, and the holidays were come. One morning whilst I sat at work, the snow lying thick on the outside of the casement, and weighing down the great leafless rose-tree which shadowed it, such of the scholars as performed little offices of duty came one by one to courtesy their adieus.—The little letter-carrier was the last of these visitants. She opened the door, came very gently in, closed it, and stood in its deep shadows. At all times lovely, she looked eminently so now in her quaint garb, and with her look of holiday happiness. A small bundle in a scarlet handkerchief rested on her arm; her warm gray duffle-cloak was wrapped close about her; her bonnet was quaintly tied on with a little shawl, to keep it from blowing off in the snow and wind, and she formed altogether a picture, in her childlike innocence and Hebe beauty, such as few could have looked upon without admiration.

Our Christmas was a quiet one; but the last day of the old year brought grander things. I have a bachelor relation, who passes six days of every week in a railway Babel in Liverpool, notifying the arrival of American cottons, or the departure of English goods. He had obtained a brief holiday, and would come to see us. I therefore put by work and all signs of it; and the night before, set about the preparation of a grand Christmas-pudding—chopping suet, stoning plums, and so on. The next day at noon, with deep snow lying round, came our quaint, though not old friend, his pockets and carpet-bag filled with divers things for our aged alms-woman, for this was our little festival to her. Then came an hour's chat by my study-fire; then dinner of an elaborate griblet-pie; then a pleasant afternoon and evening, till it became time to see about the final elaboration of the great pudding. But, lo! in the hurry of the day, the eggs had been forgotten, and our good domestic, search where she might, could get none; for the morrow was New-year's Day, and everybody was going to have a pudding. Fortunately, I am not turned easily from a good purpose, either in regard to trifles, or in things of more moment; and I resolved, though the night

was truly Siberian, to set forth on this search myself, as it would never do to send our bachelor back on his journey of seventy miles without tasting pudding; so wrapping myself up, he and I set forth, the brilliant moonlight converting the night into day, and shining with inexpressible beauty on the great waste of snow around. To village and farmhouse doors we went; our appearance in some cases creating quite a wonder; but nobody had any eggs to spare, for everybody was going to have a pudding. Yet the walk and what we saw, would have made up for much greater disappointment. Such pleasant warm homes; such pretty rustic festivals; such jugs of home-brewed ale; such crab-apples dancing on the top; such steaming puddings, and pies, and roasts; such gossip; such merry children; such cheerful old men and aged dames—these, with the deep snow outside, the wild, solitary country, the distant forge-fires roaring on and on, made a whole such as no pen can describe. In most cases we were hospitably asked in—in some to taste the cheer. At last, after wandering through the deep snow of a primitive little orchard, whose russet tints and crystal rivulet I had in autumn-days stayed many times to see, we came to a small farmhouse, and were admitted into a kitchen, where a wood-fire roared up a chimney centuries old. A little new-born baby, its newly risen mother, and the father and grandparents were gathered round, and being invited to the fire, we admired the baby, when we not only got what we sought, but also a hot jug of spiced elderberry-wine, against the tasting of which no negative would be taken. This little episode over, and many grateful thanks given, we returned home, and I finally elaborated the great pudding, as our aged alms-woman and quaint bachelor chatted beside the pleasant hearth. On the morrow, the goose proved splendid, the pudding superlative; the day was pleasant; the morrow also: and the next day, the quaint bachelor departed. It snowed incessantly all night; the next morning, a drift, three feet high against our door, fell forward into our room when it was opened. For full ten days, my walks were at an end; for four we had no post; a drift, fourteen feet deep, lay on a declivity of the high road. It was a perfect Siberia in England; but everybody knows about that pitiless winter.

With the spring flowers, I had to take leave of my peaceful study and my constant robin. Partly from want of leisure, partly as a matter of taste, I had made but few acquaintances amongst the elderly gentlewomen; nevertheless, a series of most pleasant tea-drinkings closed my peaceful visitation. The dear motherly hearts were full of interest, goodness, and human kindness—virtues which sit so gracefully on the old. There was no farewell

more pleasant than that of an aged lady whose room opened from the great gallery above my favorite cloister. A lady in the strictest sense: it had been my habit to visit her chiefly on Sabbath evenings, when throwing a shawl around me, and taking our great lantern, I wound my way up the wide old staircase to her door. Then going in, there was her glowing hearth, her small round table near it, her spotless handkerchief, her books, her light, her room all nicely and neatness, with pretty landscapes round its walls, the work of daughter-like accomplished nieces, and herself—the brightest picture in the room—in her neat apparel, and with sensible and comely face. What true things must culture and refinement be, when they thus cleave to us in the ebbs of fortune and the decline of years! Another visit was to a cloister neighbor—one ninety years old—who, with her faculties yet bright about her, and as cheerful as a bird in spring, sits always by her hearth, saving in summer-days, in an ancient costume of frill and kerchief; a sketch for Rembrandt, and as though ever ready for the beneficent summons of the Great Renovator. Nor did my little handmaids forget me; a deputation waited upon me with pincushions, needle-books, and markers enough to last a life. There was one from whom I parted with more regret than all—the presiding spirit of the place, whose friendship is the richest boon this sojourn afforded me.

Farewell, noble charity!—may your hearths long be bright as when I saw them—your walls shelter the infirmities of age—and your genial beneficence soothe the memory of past sorrows!

From the Examiner.

*Sketches and Anecdotes of Animal Life.* By the Rev. J. G. Wood, M. A., F. L. S., etc. With illustrations by Harrison Weir. Routledge & Co.

In form and price, as in title, this little volume is quite unassuming. It contains sketches and anecdotes of forty four-footed creatures, and still carries over to the credit of a book that is to come the accounts of such animals as the elephant, rhinoceros, hippopotamus, and others. Here we meet with our familiar friends, the horses, dogs and cats, oxen and sheep, hares and rabbits, rats and mice, foxes and deer, with many others, including lions and tigers, wolves, bears, ichneumons, opossums, and so forth. The account given of each creature is not so much descriptive as illustrative and anecdotal. It is all very welcome gossip, put together in a way that neither invites nor requires to be severely

judged. Children would be spending their time pleasantly and well who should be found engaged over its pages, and those very wise people, their elders, if they took it up, would certainly be interested.

Alas for our pets! The author had a pet cat:

I missed it from its accustomed place at my table, and inquired from my servant where it was. "Cat, sir," he replied, with all the nonchalance in the world; "the cat, sir; it's been *baked these three days, sir.*" I was naturally rather astonished at this circumstance, and thought that possibly some enthusiastic reader of Chinese manners might have had the cat cooked as an experiment. The poor animal, however, had escaped that danger, but had been accessory to its own destruction in another manner. It had been induced, by the warmth of the oven, to creep into one of the corners, and there had, in all probability, fallen asleep. There, however, it was found, coiled up in a corner, and completely baked. It must have died from suffocation, as it did not move while the oven was being newly heated, and was probably dead before the oven was opened for that purpose; at all events, its attitude was that which a sleeping cat assumes.

After these lines had been printed, an account was sent to me of another cat, who had met with its death in a similar manner. The owner of the poor animal, wishing to show to his friends that the cat must have probably died without pain, learnedly remarked, that before the creature died, "skumfication" must have taken place.

To this terrible catastrophe we add a pleasant sketch of the life and character of a college dog.

Rory was essentially a college dog, and, as such, recalls recollections of college dogs as a class. I think that college dogs deserve to be reckoned as a separate class, like shepherds' dogs, for they, as a body, have certain peculiarities that distinguish them from all other dogs. It is said that almost any breed of dogs can be trained as shepherds' dogs, and it is quite certain that there is no living species of dog that has not led a collegiate life.

In the first place, almost every resident member of the University possesses a dog, and many possess several. Indeed, at my own college, it was estimated that each member of the college had a dog and a third, while in another college, two dogs and a quarter was the average. In the latter college, the authorities, thinking that the rage for dogs was carried to an unpleasantly large extent, issued a peremptory edict that no dogs were to be allowed in college at all. So all the large dogs were immediately turned out, while the little ones led an unhappy existence in drawers and hat-boxes, until their impatient barks caused their expulsion, accompanied with a fine levied on the purse of their masters. For some time the edict remained in force, until the undergraduates, finding their existence to pass miserably without the presence of their beloved dogs, counselled together how they should procure a

repeal of the edict. Various methods were promulgated, such as putting a caricature in the print shops, petitioning the college, inserting a letter in the *Times*; but at last the following brilliant scheme was decided on:

It was well known that the venerable individual who presided over the college was likely to leave the college gates at a certain hour. The conspirators accordingly prepared themselves, and as the authority in question walked through the "quad," he was met by the whole body of quondam dog-owners, being seven-eighths of the entire college, each leading a very small kitten by blue ribbon, kittens not being included in the edict issued against dogs. There was no standing this, so the worthy "don" smiled good-naturedly as he met the phalanx of kittens; and by some wonderful coincidence of circumstances, every dog was reinstated that very day.

Now for the character of the college dog in general. The college dog is a very peculiar animal. He is treated as a companion, and conducts himself accordingly, entering into all his master's amusements, ensconcing himself quietly behind the netting in the tennis-court, watching his play with the greatest eagerness, sitting at the head of his skiff when he rows, lying at the bottom of his canoe when he paddles, or running about his punt as he poles it up the Cherwell or Isis. In the former case the punt is usually moored to the river side, and the occupant, stretched at ease on certain "long cushions," belonging to the punt, and ingeniously composed of carpeting and straw, smokes a pipe with a large bowl, to save the trouble of filling, and reads a novel until he goes to sleep. In this case, his dog takes upon himself the care of his sleeping master, and guards him against the various practical jokes that a sleeping dogless man is sure to be subjected to. He accompanies his master to the cricket-ground, and contemplates the game; or follows him to the "Weirs," where, if his master is not a skilful shot, he not unfrequently receives part of the charge intended for a pigeon. He is indifferent as to the means used in transporting him from place to place, being perfectly contented to be carried by his tail, or a leg, or his ears, or by a handful of skin, or by any way that comes uppermost. A railway journey is nothing to him, and he luxuriates in a sail.

He makes acquaintance with out-college dogs when his master is out of the way, but cuts them dead as plebeian when his master is with him. He has a general acquaintance with all the college servants, but prefers those attached to the kitchen department, and has an objection to the scout of his own staircase, as he sometimes receives a sly kick from that gentleman in return for the perquisites eaten by the dog, which otherwise would have gone into his own basket. At breakfast, he conducts himself with great propriety; and at a wine party he sits upright on a bracket by the fire-place, and catches with much dexterity pieces of biscuit thrown to him, or supports in a victimized manner a long pipe put into his mouth, which he abominates, but dare not let fall. When his master rides or drives, he runs unlimited distances after him, and returns home covered with mud, whereupon he is sedu-

lously pumped on by the scout until clean. He has no kennel or sleeping place in particular, but passes his nights on the mat outside the door, or in the wine bin, or on the sofa, or on the hearth-rug, if sufficiently fortunate. But in general he is rather afraid of the hearth-rug. For collegians always want everything in a hurry, and whenever they want hot water, they put on the kettle, cover the fire-place with the "blower," a flat piece of iron that only admits the air at the bottom, and consequently raises a tremendous fire, causes the kettle to boil furiously in about three minutes or so, and makes the boiling water spatter all over the hearth-rug, directly the blower is removed. On the whole, the college dog prefers the sofa or the easy chair, which latter article is so large that it cannot be got out of the door, and was, probably, brought into the room in detachments, and there put together.

If the dog is born in college, he is, together with his brothers and sisters, put on a tea-tray, and carried about to be inspected by the whole college, in spite of the remonstrances of his mother; and being in his early childhood constantly used in the light of a ball, he becomes habituated to all kinds of ill-usages, and when pitched into one of the gas lamps adorning the quad, he curls himself up and goes to sleep.

In fine, he passes two or three years of unalloyed happiness; but when he leaves college, his prosperity changes, particularly if there are ladies in the house to which he removes. For, as he is seldom such a dog as a lady patronizes, he is banished from the house, and forced to live in a kennel at the end of a chain, at which he tugs furiously, and moans piteously all day and most of the night. No more sitting on brackets for him; no more breakfast parties; no more games with canine and human playfellows; so he forgets his accomplishments, and sinks into a common house-dog.

And as a companion-picture to this reminiscence, we must certainly produce the college bear.

Such an animal was the renowned Tiglath Pileser, the gentlemanly Oxford bear. He was one of the Syrian bears, the animals mentioned in the Book of Kings, as the destroyers of the children that mocked Elisha. The color of these bears is a yellowish white, except when they are young, at which time the fur is brown. It is somewhat remarkable that the young of a white animal should be dark, while the young of many dark animals, such as the Agile Gibbon monkey, or the Hippopotamus, should be light. An opposite change of color takes place in the young of the lion and puma, whose fur is spotted or brindled until they attain to mature years.

But to return to Tiglath Pileser, called, for the sake of brevity Tig. He was a contemporary of my dog Rory, and was much such an individual among bears as Rory among dogs, and indeed in many points their tastes were identical. The history of Tig has several times been presented to the public, and I shall, therefore, give but a short notice of him.

His entrance into the University was marked

by that eccentricity of demeanor which never deserted him through his life. Immediately on escaping from the confinement of the hamper, in which he had made a long railway journey, he ran away, and passing down the cloisters with which the rooms of his master communicated, he got into the cathedral just as the first lesson was being read. So unaccountable an intruder caused great discomposure in the mind of the verger, who took refuge in a pew, and fastened the door. The bear derived his name from this exploit, as the name of Tiglath Pileser happened to be mentioned just when he entered the cathedral. Tig soon escaped from the cathedral, and after a severe chase in "Tom-quad," was captured by means of a gown thrown over him, and was led back to his proper home, walking on his hind legs and sucking one of his master's fingers, an amusement of which he was very fond.

His collegiate life now began, and he conformed himself admirably to the customs of the University, meaning, of course, the under-graduate portion of the University. He was decked in cap and gown, and conveyed to wine parties, where he made himself very much at home, and ate ices with great discrimination. By the way, it seems to be an invariable custom with collegians to dress their favorites in full academicals. When the famous dwarf, General Tom Thumb, was in Oxford, he had a little cap and gown made for him, the model of the cap being the tailor's fist, and the gown proportionately small. In these habiliments he went round the colleges to pay his respect to the University as represented by its members.

Tig ought to have lived in a little yard on which his master's rooms opened, but he made such a noise when left alone at night, that he was brought into the rooms in self-defence. Moreover, in the same yard were an eagle, a tortoise, and a monkey, neither particularly good company for poor Tig, for the monkey used to pull his ears or hair, while the eagle, being un-conversational in his habits, stood on the tortoise almost all day, and beguiled the hours by trying to eat it—a proceeding which the tortoise endured with the greatest equanimity.

So Tig's life became that of an under-graduate, and when vacations came he left the college with his master, and lived in a village, where he played sundry pranks. On one occasion he was taken for a ride to a distant village, his hind legs resting on the horse's back, and his fore paws on his master's shoulders. The horse evinced great disapprobation of the claws that Tig wore on his hind feet, and plunged about in order to shake off the incumbrance. But Tig held on quite firmly, and reached his journey's end in safety.

As he grew older, his fur became whiter, and he bid fair to become a beautiful specimen of a Syrian bear. The authorities, however, at the college, not being quite so much attached to the bear as the junior members, and having for some time exercised considerable forbearance on the subject, at last issued the fatal mandate, and poor Tig's last day at college arrived. In order that he might be properly attended to, he was sent to the Zoological Gardens and put in a den. But the mandate of expulsion was indeed a fatal one,

for the poor animal could not be reconciled to the change, and after some time spent in incessantly running up and down his den in vain efforts to escape, he was found dead one morning.

A line or two concerning leopards and lions.

The leopard is generally tamed without difficulty, and appears more sportive than any other animal of the same family. There are several young leopards now in the Zoological Gardens, whose movements among the branches of the tree that is placed in their cage are most graceful. They spring about with such rapidity that the eye can hardly follow their figures. Suddenly one of them appears to be tired, and crouches in some strange position, usually lying flat along a branch, or packed into a forked branch, where it lies very quietly until one of its companions comes unsuspectingly by, when it springs up, gives its friend a pat, and dashes off with more energy than ever. In another menagerie, where several animals were kept in one cage, the leopards evidently considered that the great object of the black tip of the lion's tail was to afford them amusement. This being their opinion, they acted up to it, and that unfortunate lion could not even wag the end of his tail without a leopard pouncing upon it. Even when he got up and walked up and down his cage, keeping his tail perpendicularly in the air to get it out of the way of his tormentors, one leopard jumped up on a shelf near the top of the cage, and hit the lion's tail a hard pat every time he passed under the shelf.

There are stories of all kinds in this little book, though we have chosen our extracts chiefly to show the spirit of good humor by which it is characterized.

From *The Spectator*.

#### MAHEW'S DOGS.\*

How far the dog-doctoring of this volume may be canonical, we cannot say. It is founded on a close observation of the animal's living nature, as well as a knowledge of his anatomical structure, and a study of the only two authoritative writers on canine diseases, Blaïne and Youatt. The practice looks sound and judicious; because it is cautious and safe—assisting, not interfering with nature—eschewing violence or much "doctor's stuff," yet not shrinking from sharp remedies when sharp diseases require them. This, however, must be for the consideration of those who re-

\* *Dogs: their management. Being a New Plan of Treating the Animal, based upon a consideration of his Natural Temperament.* Illustrated by numerous wood cuts, depicting the Character and Position of the Dog when suffering Disease. By Edward Mayhew, M.R.C.V.S.; Author of "The Horse's Mouth, showing the age by the Teeth." Published by Routledge and Co.

quire canine practitioners; and the class must be more numerous than many would imagine, otherwise there would be no medico-canine literature, if there were even dog-doctors. It argues a high state of luxury or civilization when we not only have regular practitioners to treat an animal of proverbially little account, but original scientific books written upon the subject, and that not with a view to the seemingly most expensive and important of all—hounds; for they, our author considers, are in general well managed.

Mr. Mayhew's *Dogs*, however, is almost as much a book of natural history as a treatise on the general health of the canine race, the diseases to which they are subject, and the best mode of managing them. In his introductory chapter he touches upon the vexed question of the origin of the dog; disposing of the claims of the wolf and the jackall, more summarily, perhaps, than satisfactorily, by means of portraits; for dogs really differ as much from each other as they do from the wolf and the lion's provider,—as in the pug and the Newfoundland. In the same chapter of general remarks, he gives some interesting sketches of the temperament and mental characteristics of the genus, as well as of the traits that distinguish the various species or families. A similar spirit of close and original observation on the habits and even feelings of dogs is contained in the account of their particular diseases and the necessary treatment. The mental as well as physical nature of the animal is evolved in various ways when describing symptoms and directing operations or ministrations. That Mr. Mayhew may take a partial view of his canine friends, is probable; that he sometimes falls into a manner rather too forced and digressive for simple exposition, is clear. This peculiarity, however, adds to the popular attraction of the book.

According to our author, the dog has a more highly nervous organization than is generally supposed; and upon this opinion much of his practice and all of his ministration is based.

"Before any mention is made of the diseases of the dog, it will be proper to take some notice of the temperament of the animal; as without regarding this the best-selected medicines, or the most assiduous attention, may be of no avail.—Any one who will observe the animal will soon be made aware of its excessive irritability.—The nervous system in this creature is largely developed, and, exerting an influence over all its actions, gives character to the beast. The brain of the dog is seldom in repose; for even when asleep, the twitching of the legs and the suppressed sounds which it emits inform us that it is dreaming. No animal is more actuated by the power of imagination. Who is there that has not seen the dog mistake objects during the dusk of the evening? Delirium usually precedes its death, and nervous excitability is the common

accompaniment of most of its disorders. To diseases of a cerebral or spinal character it is more liable than is any other domesticated animal. Its very bark is symbolical of its temperament, and its mode of attack energetically declares the excitability of its nature. The most fearful of all the diseases to which it is exposed (rabies) is essentially of a nervous character, and there are few of its disorders which do not terminate with symptoms indicative of cranial disturbance.—This tendency to cerebral affections will, if properly considered, suggest those causal and appropriate acts which the dog in affliction may require, and which it would be impossible for any author fully to describe. Gentleness should at all times be practised; but to be truly gentle, the reader must understand it is imperative to be firm. Hesitation, to an irritable being, is, or soon becomes, positive torture."

The dog, like other pets, knows when he can take liberties, and is most manageable when away from those who spoil him.

"Strange dogs are not easily examined in their own homes, especially if they be favorites and their indulgent owners are present. Like spoiled children, the beasts seem to be aware of all the advantages which the affections of their master give to their humors. They will assume so much, and play such antics, as renders it impossible to arrive at any just conclusion as to the actual state of their health. Dogs in fact are great impostors, and he who has had much to do with them soon learns how cunningly the pampered "toy" of the drawing-room can "sham." For deception, consequently, it is necessary to be prepared, and practice quickly teaches us to distinguish between what is real and that which is assumed. The exertion, however, required to feign, disturbs the system, and the struggle which always accompanies the act renders it frequently impossible to make the necessary observation with requisite nicety. Petted dogs are, therefore, best examined away from their homes and in the absence of any one who has been in the habit of caressing them. Frequently I have found it of no avail to attempt the examination of these creatures at the residences of their owners; but the same animals brought to my surgery have without a struggle allowed me to take what liberties I pleased. I usually carry such dogs into a room by myself, and commence by quickly but gently lifting them off their legs and throwing them upon their backs. This appears to take the creatures by surprise, and a little assurance soon allays any fear which the action may have excited. The dog seldom after resists, but permits itself to be freely handled. Should, however, any disposition to bite be exhibited, the hand ought immediately to grasp the throat; nor should the hold be relinquished until the creature is fully convinced of the inutility of its malice, and thoroughly assured that no injury is intended towards it."

The treatment of many of the diseases of dogs is, like that of human beings, of a medi-

cal nature, in which necessity supersedes delicacy. Hydrophobia, in the author's opinion, cannot be successfully treated. His picture of the malady is graphic, and will furnish a specimen of his description.

"It is no pleasure to a dog to go mad. Quite the reverse. Dreadful as hydrophobia may be to the human being, rabies is worse to the dog. It makes its approach more gradually; it lasts longer; and it is more intense while it endures. The dog that is going mad feels unwell for a long time prior to the full development of the disease. He is very ill, but he does not know what ails him. He feels nasty, dissatisfied with everything; vexed without a reason; and, greatly against his better nature, very snappish.—Feeling thus, he longs to avoid all annoyance by being alone. This makes him seem strange to those who are most accustomed to him.

"The sensation induces him to seek solitude. But there is another reason which decides his choice of a resting-place. The light inflicts upon him intense agony. The sun is to him an instrument of torture, which he therefore studies to avoid, for his brain aches and feels as it were a trembling jelly. This induces the poor brute to find out the holes and corners where he is least likely to be noticed, and into which the light is unable to enter. In solitude and darkness he passes his day. If his retreat be discovered and the master's voice bids him to come forth, the affectionate creature's countenance brightens; his tail beats the ground, and he leaves his hiding-place, anxious to obey the loved authority; but before he has gone half the distance, a kind of sensation comes over him, which produces an instantaneous change in his whole appearance.—He seems to say to himself, 'Why cannot you let me alone? Go away. Do go away. You trouble, you pain me.' And thereon he suddenly turns tail and darts back into his dark corner.—If let alone, there he will remain; perhaps frothing a little at the mouth, and drinking a great deal of water, but not issuing from his hiding place to seek after food. His appetites are altered; hair, straw, dirt, filth, excrement, rags, tin shavings, stones, the most noisome and unnatural substances, are then the delicacies for which the poor dog, changed by disease, longs and swallows, in hope to ease a burning stomach. So anxious is he for liquids, and so depraved are his appetites, that no sooner has he passed a little urine than he turns round to lick it up. He is now altogether changed. Still he does not desire to bite mankind; he rather endeavors to avoid society: he takes long journeys of thirty or forty miles in extent, and lengthened by all kinds of accidents, to vent his restless desire for motion. When on these journeys, he does not walk: this would be too formal and measured a pace for an animal whose whole frame quivers with excitement. He does not run: that would be too great an exertion for an animal whose body is the abode of a deadly sickness. He proceeds in a slouching manner, in a kind of trot—a movement neither run nor walk; and his aspect is dejected. His eyes do not glare and stare, but they are dull and retracted.

His appearance is very characteristic, and if once seen, can never afterwards be mistaken. In this state he will travel the most dusty roads, his tongue hanging dry from his open mouth; from which, however, there drops no foam. His course is not straight. How could it be, since it is doubtful whether at this period he sees at all? His desire is to journey unnoticed. If no one notices him, he gladly passes by them. He is very ill. He cannot stay to bite. If, nevertheless, anything oppose his progress, he will, as if by impulse, snap; as a man in a similar state might strike, and tell the person 'to get out of the way.' \* \* \* \* \*

"He may be slain while on these excursions; but if he escapes he returns home and seeks the darkness and quiet of his former abode. His thirst increases, but with it comes the swelling of the throat. He will plunge his head into water, so ravenous is his desire; but not a drop of the liquid can he swallow; though its surface is covered with bubbles in consequence of the efforts he makes to gulp the smallest quantity. The throat is enlarged to that extent which will permit nothing to pass. He is the victim of the most horrible inflammation of the stomach, and the most intense inflammation of the bowels.—His state of suffering is most pitiable. He has lost all self-reliance; even feeling is gone. He flies and pulls to pieces anything that is within his reach. One animal in this condition, being confined near a fire, flew at the burning mass, pulled out the live coals, and in his fury scrunch'd them. He emits the most hideous cries.—The noise he makes is incessant and peculiar: it begins as a bark, which sound, being to torturing to be continued, is quickly changed to a howl, which is suddenly cut short in the middle; and so the poor wretch at last falls, fairly worn out by a terrible disease."

From Chambers's Journal.

#### WHAT IS AN OVAL GUN?

STIMULATED by the war-trumpet which now resounds throughout Europe, we took up arms some time ago in our own fashion, presenting our readers with a short description of the various kinds of fire-weapons employed up to that period in military service. We exhausted the list. No important fire-arm of any description remained to be particularized. Yet a little reflection on the relations between demand and supply might have awakened a suspicion that the list would soon be extended. In times like the present, when the military resources of nations in all that relates to engines of war are so nicely balanced, the discovery of a cannon able to project a missile a few yards further than any other, may involve the battering down of a fortress, the conquest of an enemy, the termination of a war. Mr. Lancaster, the gunmaker of Regent Street, among others, has been at work. He has turned his attention to the improvement of large fire-

arms, and, we believe, with success. At any rate, the new class of gun and despatch boats, which the shallowness of the Baltic demands, and which, mushroom-like, have sprung into existence with such marvellous rapidity, are armed, as newspaper-reports tell us, with Lancaster's *oval* guns. Oval guns! One hardly comprehends the meaning of the term. The discovery of a new cannon of tremendous power just at the present time, when we have an enemy to chastise whom we do not wish to be so well informed as ourselves concerning our warlike resources, is naturally suggestive of secrecy. Perhaps, therefore, the term *oval gun* has been advisedly used, for the purpose of mystification. The newspaper reader suspects the fact. He determines to look out for the next report, and to learn further particulars from the context. Well, a few days elapse, and he finds it mentioned that Lancaster's oval guns are very well adapted for throwing *spherical* case-shot! This is a quietus—he relinquishes the study of newspaper contexts in despair. An oval gun for throwing *spherical* case-shot!

But let us see how we can help him. Having donned our fighting-gear at any rate, we shall now try what we can do with the new Lancasterian oval gun. First, then, let us premise that the chief cause of irregularity in the flight of all projectiles, is the irregular disposition of the matter round their respective centres of gravity. Every person, in the least degree conversant with mechanical science, must be aware, that of all possible shapes that of a sphere presents the greatest chance of the centre of gravity coinciding exactly with the centre of the object. Nevertheless, if a thousand cannon-balls were set floating in mercury, not two out of the thousand, it is probable, would float alike; thus proving the unequal distribution of parts around the centre. Of course, a similar inequality of distribution exists also in smaller globular masses. Whether we have to do with a cannon-ball or a musket-ball, the conditions remain the same. However, in the case of small firearms, errors resulting from the cause above mentioned are obviated by rifling the barrel, and converting an ordinary musket into a rifle-gun. If rifling has succeeded so well in the case of small firearms, then why not rifle cannon? it may be asked. Because, simply, it could not be done; or if done, the rifling produced with so much labor, would be ineffective. The reason of this we shall see by and by; but in the mean time, let us take a glance at the construction of a rifle-gun.

If the finger be thrust into the muzzle of a common musket or fowling-piece, nothing will be discoverable but a smooth round bore, going straight down towards the breech. If a rifle—any ordinary rifle, that is to say—be

thus examined, it will be found to have peculiarities of its own. The bore, instead of being smooth, as in the instance of the musket or fowling-piece, will be found indented with a variable number of little furrows and belts; and unless some little attention be devoted to the investigation, no peculiarity of these furrows and belts, technically called *lands*, will be discoverable. Further examination, however, will prove that they are arranged spirally, but with such elongation as to effect only one, or, it may be, one revolution and a half, in proceeding from the muzzle to the breech. Now it follows, that if a leaden ball be jammed into such a barrel as we have described, in such a manner as to receive an impress of the rifle-lands or ridges, then such ball can emerge from the barrel only by following the threads of the screw, turning rapidly on its axis during the period of discharge, and retaining the same rotatory motion during its atmospheric flight. Of this sort is the motion of a rifle-ball; and the reader will at once see, that the continuous rotatory motion practically compensates for any inequality of ponderable matter on any one lateral aspect of the projectile. Point by point, and with extreme rapidity, every lateral aspect of a rifle-ball in flight is brought into the same relation with the axis of flight. In this description we have assumed that a bullet, emerging from a rifled-barrel, must necessarily assume the rifled motion. Under one condition, however, it may not do so. If the charge of gunpowder be inordinately great, the ball may *strip*, to use the technical phrase; in other words, it may have its screw-thread rendered ineffective by the mere force of discharge. It appears, then, that the very principle of a rifle-gun necessitates the indentation of the projectile with the lands or grooves wherewith the barrel is furnished; and this brings us to the consideration of loading a rifle: either the ball is rammed down from the mouth, or it is put in by some trap-door contrivance near the breech, where, fitting tightly, it is made to emerge by the sheer force of gunpowder. Rifles of the latter construction seem best on paper; in practice, however, they have been very sparingly adopted, mouth-loading having continued to be generally preferred. Notwithstanding this preference, they are ordinarily so difficult and so tedious to charge, that much attention has lately been devoted to the perfection of schemes for charging them with greater facility. The most celebrated, and at the same time the most successful of these, is the arrangement of Captain Minié, which, having been adopted by Mr. Lancaster in a modified form, we are bound to describe.

The desideratum was, the construction of a projectile which, entering loosely into the barrel, should fit tightly during the act of dis-

charge. M. Delvigne, if we mistake not, was the first to solve this problem. He furnished the breech-end of his rifles with each a little anvil, projecting in the middle, space being left for the charge of gunpowder all around. Against the anvil, the bullet was hammered with an iron ramrod, until, by expanding laterally, it pressed into the furrows of the barrel, and assumed the condition of a screw. M. Delvigne, however, only substituted one difficulty for another; the remedy was almost worse than the disease. If a soldier had to stand hammering with an iron ramrod, he might as well adopt the more ancient expedient of driving in the ball tightly at first. Moreover, the little anvil, or *tige*, was continually liable to bend and break, and barrels of this kind were difficult to clean. The *carabine à tige*, nevertheless, marked a new era in the history of rifle-guns, and prepared the way for the more practical measures of Captain Minié. We have spoken of the projectile employed by Delvigne as being a bullet; it, however, was not a bullet, but a cone or conoid—a form of metal which not only presented greater facilities than a globular mass for lateral compression, but which, assuming its sharp end to go foremost, was far better adapted for flight through the air than a globular mass, even when not flattened. Now it is not a little curious, in running through the history of rifle-guns, to find the adoption of sharp conical projectiles in place of bullets so long deferred. So long as projectiles had to be launched from non-rifled barrels, the only chance of assuring accuracy of flight in the latter consisted in making them spherical; but rising being once adopted, theory suggests the employment of elongated projectiles—those more nearly resembling the shape of an arrow. Advantages great and numerous flow from this. Not only is the weight of the projectile no longer rigidly limited by the diameter of the bore, but the projectile itself readily becomes adapted to the principles of Capt. Minié now to be mentioned. The shape of a minié-ball, if we may be permitted to continue that name, is conoidal, very much like a sugar-loaf in appearance. As regards material, it, like all other small-arm projectiles, is made of lead—a soft, easily-expandable material. Now it is clear, that if a nail or plug of any kind were to be driven into the base of a leaden projectile of this kind, the leaden surface would expand; and this is just what the principle of Capt. Minié accomplishes. Each minié-cone—we will no longer term it minié-ball—is hollow at the base, and into this hollow a small metallic thimble is loosely inserted. Of course, the thimble in question, from its very position, receives the first shock of inflamed gunpowder—a shock which acts just like a hammer-stroke, driving the thimble a

considerable distance up into the hollow cavity, and, as a consequence of this, expanding the walls of the projectile. Such is the system of Captain Minié, which Mr. Lancaster has adopted, minus the thimble, in his new small-arm rifle.

We now come to the particular in which Mr. Lancaster's rifle-gun differs from all others. It is totally devoid of grooves or lands. To the touch, it is quite smooth, like any fowling-piece or musket; neither is the eye competent to detect, at once, any difference; but on minutely scrutinizing the shape of the bore, it will be found to be very-slightly oval. Perhaps the reader will anticipate the function which this oval is intended to fulfil; it does not go straight down through the barrel, but revolves in the descent, exactly like rifle-lands or grooves, and thus would necessarily impart a rotatory motion to any accurately-fitting projectile. Such, indeed, is the intention. What, then, are the advantages possessed by an oval or smooth bored over an ordinary grooved rifle? They are numerous. In the first place, there is an end to stripping the projectile, no matter how high the charge: it *must* assume the screw-like rotation. Secondly, the conical projectile, duly expanded by inflamed gunpowder, accurately fills the rifle-barrel, no space intervening to permit the escape of gas. Thirdly, and what is more to the special point under consideration, the projectile is no longer necessarily required to be made of lead. The problem is no longer to cut screw-indentations into a yielding surface, but to adapt an oval plug to an oval cavity. If lead be the material employed, the minié or expansive principle may be adopted with advantage, but equally compatible would it be to fashion the projectile at once of a form corresponding with the bore of the gun, in which case the material of such projectile may be iron. This is a very great point gained. As a rule, cannons must be supplied with iron balls; and iron balls are altogether unmanageable in connection with the principle of ordinary rifles. Supposing, for the sake of argument, that leaden balls were compatible with the necessities of large firearms, still their employment in connection with ordnance rifled on old principles would be impossible. If designed to be charged by the mouth, the mechanical force requisite to drive home to their charge such balls would be enormous; and as regards the idea of breech-loading ordnance, it suggests difficulties greater than those attendant on breech-loading small firearms. What should prevent the construction of cannons bored on Lancaster's oval-principle? Why should rifled-cannons, thus constructed, be inferior in positive accuracy and relative length of flight to oval rifled small-arms? These are among the ques-

tions now on trial; and the military world—which means, just now, pretty nearly all Europe—await the decision with much interest.

From Chambers's Journal.

### SONGS OF THE DRAMATISTS.

THE new volume of Mr. Bell's Annotated Edition of the English Poets is devoted to the Songs of the Dramatists, from the earliest writer of regular comedy down to Sheridan. The idea of this selection is a happy one; and the volume supplies, to a considerable extent, what has been long felt as a desideratum in our literature. The general reader, however, will hardly recognize here, we suspect, the "riches" described by the editor as existing in this branch of our lyrical poetry. A comparatively small number of dramatic songs are poetical, in the higher sense of the word; and the reason is, that they are not spontaneous—they are introduced for a particular purpose, to illustrate a circumstance or a character. The writers who have a wider margin before them, who sing what they feel or see when the spirit moves them, are generally more successful, notwithstanding the brilliant dramatic lyrics of Shakspeare, Beaumont and Fletcher, and Ben Jonson, that might be cited on the other side. A selection of English lyric poetry which does not include the names of Carew, Withers, Herrick, Heywood, Herbert, Lovelace, and others, can give but a very imperfect idea of the general richness of the language in that style of composition.

Mr. Bell's task, however, was confined to the drama; and he has executed it with great care, although in some few instances, towards the end of the volume, he appears to have sacrificed value to novelty—selecting specimens, not because they are the best, but because they are less known than the best. We cannot well see, however, what Sheridan has to do in the series. If no good songs could be found between the beginning and the close of the eighteenth century, it should have ended with Farquhar, instead of springing over a gap of about seventy years, in order to close with the brilliant author of the *School for Scandal*.

Strange as it may appear, the great advantage possessed by our earlier song-writers consists in the comparative want of polish, so far as the vehicle is concerned. They give the idea fresh, sudden, and direct as it comes, taking their chance as to the melody of the language in which it is delivered. With most of the more modern writers, on the contrary, melody is everything; force, passion, energy, must give way to it; and they elaborate in a stanza an imagine which their predecessors

would have darted like an arrow in a single line. That this directness, however, is perfectly consistent with melody, is proved in individual instances, and in the case of Shakspeare throughout, who unites the energy of the old with the sweetness of the new school. It is likewise proved, among the moderns, in the case of Burns, whose force belongs more to the close of the sixteenth century than to his own time, while in musical cadence he is unmatched even by the most effeminate of still later writers. These instances serve to shew that the music exists in the soul of the true poet, and is not the result of elaboration. Ben Jonson studied harder than Shakspeare, and was a more accomplished scholar; but although some of his pieces are very graceful, they want as a whole the bewitching melody of his great contemporary.

A misconception of this fact leads some of our living poets far astray. They strive to go back in a certain way to the directness of the old song; but finding that generally associated with roughness, they fancy roughness to be one of its necessary attributes. Even setting this mistake aside, they miss their point; for the arrow of the old poet quivered in the heart, while theirs only tickles the imagination. To draw tears, or excite smiles, they consider wide of the poet's task, the object of which they conceive to be the awakening of surprise or admiration. The sudden sentiment that makes your heart beat and your eyes overflow is not poetical with them, because it presents no sensuous image to the mind. Their performances, when successful, are, in short, not so much flashes of genius as tricks of ingenuity. A sentiment—not an image—occurs to us at this moment which is worth a whole library of these dexterities. It occurs in a simple Scottish song by Hector M'Neil, in which a young lassie, tempted by her suitor, calls to mind the various reasons why she must not listen to him, but still cling to her widowed mother:

She's gien me meat, she's gien me claes,  
She's been my comfort a' my days—  
*My faither's death brought mony waes:*  
I canna lea' my mammy!

The suddenness of the line we have distinguished by italics, and its touching associations, are one of the great triumphs of poetry, let the sensuous school smile as disdainfully as it will.

The simple materials of the old song-writers are well illustrated in the first specimen given in the volume before us. It is from *Ralph Roister Doister*, the first regular comedy in our language, and certainly printed some time before 1551:—

## THE WORK-GIRLS' SONG.

Pipe, merry Annot ;  
 Trilla, Trilla, Trillarie.  
 Work, Tibet ; work, Annot ; work, Margerie ;  
 Sew, Tibet ; knit, Annot ; spin, Margerie ;  
 Let us see who will win the victory.

Pipe, merry Annot ;  
 Trilla, Trilla, Trillarie.  
 What, Tibet ! what, Annot ! what, Margerie !  
 Ye sleep, but we do not, that shall we try ;  
 Your fingers be numb, our work will not lie.

Pipe, merry Annot ;  
 Trilla, Trilla, Trillarie.  
 Now Tibet ; now Annot ; now Margerie ;  
 Now wippet apace for the maystrie : \*  
 But it will not be, our mouth is so dry.

Pipe, merry Annot ,  
 Trilla, Trilla, Trillarie.  
 When, Tibet ? when, Annot ? when, Margerie ?  
 I will not — I cannot — no more can I ,  
 Then give we all over, and there let it lie !

As an extraordinary contrast to this, and in so short a time after it as 1584, we give a specimen from John Llyl, the inventor of the Euphuism, touching which Sir Percy Shafton lectures so zealously in the *Monastery* : —

## CUPID AND CAMPASPE.

Cupid and my Campaspe played  
 At cards for kisses — Cupid paid ;  
 He stakes his quiver, bow and arrows,  
 His mother's doves, and team of sparrows ;  
 Loses them too ; then down he throws  
 The coral of his lip, the rose  
 Growing on 's cheek (but none knows how),  
 With these, the crystal of his brow,  
 And then the dimple of his chin ;  
 All these did my Campaspe win.  
 At last he set her both his eyes ;  
 She won, and Cupid blind did rise.  
 O Love ! has she done this to t.l.ee ?  
 What shall, alas ! become of me ?

Passing over Shakspeare and his immediate predecessors, we come, in a quarter of a century after this, to Ben Jonson, from whom we are tempted to quote a single song, which, as Mr. Bell observes, is a " remarkable illustration of the art with which he constructed these compositions : " —

## THE GRACE OF SIMPLICITY.

Still to be neat, still to be drest,  
 As you were going to a feast ;  
 Still to be powdered, still perfumed :  
 Lady, it is to be presumed,  
 Though art's hid causes are not found,  
 All is not sweet, all is not sound.

Give me a look, give me a face,  
 That makes simplicity a grace ;

\* Mastery, superior skill.

Robes loosely flowing, hair as free :  
 Such sweet neglect more taketh me,  
 Than all the adulteries of art :  
 They strike mine eyes, but not my heart.

Here is an exquisite specimen from Beaumont and Fletcher, supposed to be the composition of the latter : —

## A " SAD SONG."

Weep no more, nor sigh, nor groan,  
 Sorrow calls no time that's gone :  
 Violets plucked, the sweetest rain  
 Makes not fresh nor grow again.  
 Trim thy locks, look cheerfully ;  
 Fate's hidden ends eyes cannot see :  
 Joys as winged dreams fly fast,  
 Why should sadness longer last ?  
 Grief is but a wound to wo ;  
 Gentlest fair, mourn, mourn no mo.

The following, from the same, is well known, but we give it as one of the most finished compositions of the kind in our language : —

## MELANCHOLY.

Hence, all you vain delights,  
 As short as are the nights  
 Wherein you spend your folly !  
 There's nought in this life sweet,  
 If man were wise to see 't,  
 But only melancholy ;  
 Oh, sweetest melancholy !  
 Welcome, folded arms, and fixed eyes,  
 A sight that piercing mortifies,  
 A look that's fastened to the ground,  
 A tongue chained up without a sound !  
 Fountain heads, and pathless groves,  
 Places which pale passion loves !  
 Moonlight walks, when all the fowls  
 Are warmly housed, save bats and owls  
 A midnight bell, a parting groan !

These are the sound : we feed upon ;  
 Then stretch our bones in a still gloomy valley,  
 Nothing 's so dainty sweet as lovely melancholy.

The following short piece is from John Webster, touching whom the editor follows what we cannot help thinking the exaggeration of Lamb. " To move a terror skilfully," observes Lamb—" to touch the soul to the quick—to lay upon fear as much as it can bear—to wear and weary a life till it is ready to drop, and then step in with mortal instruments to take its last forfeit : this only a Webster can do. Writers of an inferior genius may ' upon horror's head horrors accumulate,' but they cannot do this. They mistake quantity for quality ; they 'terrify babies with painted devils,' but they know not how a soul is capable of being moved ; their terrors want dignity, their affrightments are without decorum."

## A DIRGE.

Call for the robin-redbreast and the wren,  
 Since o'er shady groves they hover,

And with leaves and flowers do cover  
The friendless bodies of unburied men.  
Call unto his funeral dole  
The ant, the field-mouse, and the mole,  
To rear him hillocks that shall keep him warm,  
And (when gay tombs are robbed) sustain no  
harm;  
But keep the wolf far thence, that's foe to men,  
For with his nails he'll dig them up again.

On this Lamb observes: "I never saw any-  
thing like this Dirge, except the Ditty which  
reminds Ferdinand of his drowned father, in  
the *Tempest*. As this is of the water, wa-  
tery; so this is of the earth, earthy. Both  
have that intenseness of feeling which seems  
to resolve itself into the elements which it  
contemplates."

The following is from the *Thracian Wonder*, by Webster and Rowley, and one would  
suppose, must be the composition of the lat-  
ter:—

#### THE PURSUIT OF LOVE.

Art thou gone in haste?  
I'll not forsake thee;  
Rankest thou ne'er so fast,  
I'll overtake thee:  
Over the dales, over the downs,  
Through the green meadows,  
From the fields, through the towns,  
To the dim shadows.

All along the plain,  
To the low fountains,  
Up and down again  
From the high mountains;  
Echo then shall again  
Tell her I follow,  
And the floods to the woods,  
Carry my holla, holla!  
Ce! la! ho! ho! hu!

The two next will form an agreeable con-  
trast. The Death-bell is by Heywood, and  
the Bridal-song by Ford:—

#### THE DEATH BELL.

Come, list and hark, the bell doth toll  
For some but now departing soul.  
And was not that some ominous fowl,  
Thè bat, the night-crow, or screech-owl?  
To these I hear the wild wolf howl,  
In this black night that seems to scowl.  
All these my black-book death enrol,  
For hark, still, still, the bell doth toll  
For some but now departed soul.

#### BRIDAL-SONG.

Comforts lasting, loves increasing,  
Like soft hours never ceasing;  
Plenty's pleasure, peace complying,  
Without jars, nor tongues envying;  
Hearts by holy union wedded,  
More than theirs by custom bedded  
Fruitful issues; life so graced,  
Not by age to be defaced;

Budding as the year ensueth,  
Every spring another youth:  
All what thought can add beside,  
Crown this Bridegroom and this Bride! ■

We will now present a specimen from Shirley, who "terminates the roll of the great writers whose works form a distinct era in our dramatic literature. He was the last of a race of giants. Born in the reign of Elizabeth, he lived to witness the Restoration, and carried down to the time of Charles I the moral and poetical elements of the age of Shakspeare. New modes and a new language set in with the Restoration; and the line that separates Shirley from his immediate successors, is as clearly defined and as broadly marked as if a century had elapsed between them." The poet was a Protestant clergyman; he then fell off into Romanism; and, finally, became a writer for the stage. Being burned out by the fire of London, his wife and he suffered so much by the alarm and loss they had sustained, that they both died on the same day:—

#### LOVE'S HUE-AND-CRY.

In Love's name you are charged hereby  
To make a speedy hue-and-cry,  
After a face who, t' other day,  
Came and stole my heart away;  
For your directions in brief,  
These are best marks to know the thief:  
Her hair a net of beams would prove,  
Strong enough to captive Jove,  
Playing the eagle; her clear brow  
Is a comely field of snow.  
A sparkling eye, so pure a gray  
As when it shines it needs no day.  
Ivory dwelleth on her nose;  
Lilies, married to the rose,  
Have made her cheek the nuptial-bed;  
Her lips betray their virgin red,  
As they only blushed for this,  
That they one another kiss.  
But observe, beside the rest,  
You shall know this felon best  
By her tongue; for if your ear  
Shall once a heavenly music hear,  
Such as neither gods nor men  
But from that voice shall hear again,  
That, that is she! Oh! take her t'ye,  
None can rock heaven asleep but she.

Whether Sir William Davenant was the son of Shakspeare or not, he certainly had no inheritance in his dramatic genius; and yet we question whether the following lively, leaping song, if among the supposed paternal lyrics, would be considered the worst in the collection:—

#### JEALOUSY.

This cursed jealousy, what is't?  
'Tis love that has lost itself in a mis';  
'Tis love being frightened out of his wits;  
'Tis love that has a fever got;  
Love that is violently hot,

But troubled with cold and trembling fits.

"Tis yet a more unnatural evil:

"Tis the god of love, 'tis the god of love, possessed with a devil.

"Tis rich corrupted wine of love,  
Which sharpest vinegar does prove;  
From all the sweet flowers which might honey  
make,  
It does a deadly poison bring :  
Strange serpent which itself doth sting !  
It never can sleep, and dreams still awake;  
It stuffs up the marriage-bed with thorns.  
It gores itself, it gores itself, with imagined  
horns.

Here we would conclude; but as Sheridan has been lugged into the volume, head and shoulders, we must give a *moreau* from him. It shall not be Let the *Toast Pass*, "perhaps the most popular song in the language," but

one nearly as good, although the idea is not original:—

#### LOVE FOR LOVE.

I ne'er could any lustre see  
In eyes that would not look on me ;  
I ne'er saw nectar on a lip,  
But where my own did hope to sip.  
Has the maid who seeks my heart  
Cheeks of rose, untouched by art ?  
I will own the color true,  
When yielding blushes aid their hue.

Is her hand so soft and pure ?  
I must press it, to be sure ;  
Nor can I be certain then,  
Till it, grateful, press again.  
Must I, with attentive eye,  
Watch her heaving bosom sigh ?  
I will do so, when I see  
That heaving bosom sigh for me.

From Household Words.

#### DOCTOR PANTOLOGOS.

DOCTOR PANTOLOGOS taught school at Accidentium for thirty years. I would rather not reveal where Accidentium is. Let it be in Blankshire. We do n't want, down at Accidentium, the Government Commissioner, or any other commissioner or commission whatsoever. If we have grievances, we can suffer and be strong, as Mr. Longfellow says; or as our homely synonyme has it, we can grin and bear it.

Some years ago, indeed, we should have had far greater cause to deprecate the arrival of any strangers among us, or their inquiries into our affairs; for we had one great, patent, notorious grievance. The school that Doctor Pantologos taught was woefully mismanaged. Not by its master,—he was a model of probity and a monument of learning—but by Somebody, who might as well have been Nobody, for we never saw him or them; and the Free Grammar School at Accidentium went on from year to year, becoming more ruinous without, while it decreased in usefulness within. Somebody, who had no right to anything, received the major portion of the funds; those who ought to have had much, got little; and those who were entitled to little, got less. There were prebendaries concerned in Accidentium Grammar School, and an Earl of Something, likewise an act of parliament, Sythersett's Charity, and sundry charters, which for anything we ever saw of them might have furnished the old parchment, crabb'd hand-writing filled covers to the school lexicons and dictionaries; but for all these influential connections nobody repaired the roof of the school-room, or increased the salary of Doctor Pantologos. Both needed it very much. The vicar talked sometimes of looking into it; but he was poor, and half blind besides, and died; and his successor, a vellum complexioned young man, bound in black cloth, white lawn edges, and lettered to a frightful degree of archaeologi-

cal lore, had no leisure for anything out of church time, save stone breaking on the roads (with a view to geological improvement), and taking rubbings in heel-ball of the monumental brasses in the church chancel. Moreover, he was supposed to have his own views about a new Grammar School, which he was understood to conceive as a building in the Pointed manner; the boys to wear cassocks and bands, with crosses on their breasts, like buns; to attend church at eight o'clock every morning, and four times a day afterwards; to learn intoning, and the Gregorian choral service generally; and in the curriculum of their humanities to study Homer and Virgil far less than Augustine and Jerome. So the Vicar and Doctor Pantologos fell out, as well on this question as on the broad question of surplices, acolytes, candlesticks, flowers, piscine, and wax-candles; and the Doctor said he pitied him; while he (his name was Thurifer), wondered whatever would become of an instructor of youth who smoked a pipe and played at cribbage. Borax, the radical grocer (we had one grocer and one radical in Accidentium), threatened to show the school up; but he took to drinking shortly afterwards, and ran away with Miss Cowdery, after which he was buttoned up (an Accidentium term for financial ruin), and was compelled to fly for shelter to Douglas, Isle of Man.

The little river Dune, which in the adjoining manufacturing counties of Cardingshire, Rollershire and Spindleshire became a broad, sober, gravely flowing stream, refreshingly dirty (in a commercial sense) at Slubberville, and as black as ink at the great town of Drygoodopolis, was at Accidentium a little sparkling, purling, light-hearted thread of water, now enlivening the pebbles as a Norman ménétrier will the village maidens, making them dance willy nilly, now enticing the rushes into liquor, now condescending to act as a looking-glass for a bridge, now going out, literally, on the loose, of its own accord, by splitting up into little back waters, riv-

ulets, and streamlets, sparkling through the convolvi to the delight of the wayfarer, and scampering by cottage doors to the glory of the ducks; but everywhere through the valley of the Dune a jovial, hospitable, earnest little river: the golden cestus of Venus, by day thrown heedlessly athwart the verdant valley, at night gleaming silver bright—

As if Diana in her dreams,  
Had dropp'd her silver bow  
Upon the meadows low.

A free-hearted river, crying to hot boys, Come bathe!—and to the thirsty cows, Drink!—and to the maidens of Accidentium, Bring hither your fine linen, and see how white the Dune water will make it!

Close to the river's bank (the water was visible through the old latticed windows of the schoolroom; and, suggesting bathing, was a source of grievous disquiet to the boys in summer time), was Accidentium Grammar School. It was a long, low, old building, not of bricks but of stones so old, that some said they had once formed part of the ancient abbey of Accidentium, and others that they were more ancient still, and came from the famous wall that the Romans built to keep out those troublesome Paul Prys, who always *would* intrude: the Picts and Scots.

The latticed windows, twinkling through the ivy; the low-browed doorway, with its massive, carved iron-clamped portal; the double-benched porch before it, and sculptured slab overhead, showing the dim semblance of an esquire's coat-of-arms, and a long but almost wholly effaced Latin inscription, setting forth the pious injunctions of Christophero Sythersett, Armiger, relative to the charities he founded— injunctions how observed, oh ye prebendaries and Somebodies!—these were the most remarkable features of the exterior of Accidentium Grammar School. There had once been a garden in front, and a pretty garden, too; but the paling were broken down, and the flowers had disappeared long since, and the weeds had it all their own way. Moreover, a considerable number of the latticed panes were broken; there were great gaps in the stone-masonry; the river frequently got into the garden and would n't get out again; the thatch was rotten and the belfry nearly tumbling down; but what was that to anybody. Borax said it was a shame: but so is slavery a shame, and war, and poverty, and the streets by night—all of which nobody we know is accountable for, or in fault about.

The first thing you heard when you entered the long low stone schoolroom, with its grand carved oak roof all covered with cobwebs, and falling down piecemeal through neglect, was a din—a dreadful din. Latin was the chieffest thing learned in Accidentium School, and a Latin noise is considerably more deafening than an English noise. Every boy learnt his lesson out loud—at least every boy who chose to learn,—the rest contenting themselves with shouting out terminations as loud as they could, and rocking themselves backwards and forwards on their forms, after the manner of studious youths, learning very hard indeed. There was a consid-

erable amount of business transacted in the midst of this din, in rabbits, silkworms, hedgehogs, tops, marbles, hardbake, and other saccharine luxuries. Autumnal fruits were freely quoted at easy rates between the moods of the verb Amo and the declensions of nouns and adjectives. One Jack, a killer of giants, and seven shameless, swaggering, fire-eating blades, who called themselves champions, and of Christendom, forsooth, together with a genteel youth in complete mail, young Valentine, indeed, with his brother Orson, (not yet accustomed to polite society,) were often welcome though surreptitious guests at the dogs-eared tables, where none but the grim Vocito, the stern Vocitas, and the redoubtable Vocitavi, or at most the famous chieftains Mars, Bacchus, and Apollo, should have feasted.

After the din, the next thing you heard was the voice of Doctor Pantologos. And it *was* a voice. It rolled like the Vesuvian lava—fierce, impetuous and fiery, at first; and then, still like lava, it grew dry; and then, to say the truth, like lava again, it cracked. Grandiloquent was Doctor Pantologos in diction; redundant in simile, in metaphor, in allegory, irony, diaresis, hyperbole, catachresis, periphrasis, and in all other figures of rhetorie. Rarely did he deal in comparatives—superlatives were his delight. But though his voice rolled and thundered—though he predicted the gallows as the ultimate reward of bad scanning, and the hulks as the inevitable termination of a career commenced by inattention to the As in *presenti*; though his expletives were horrible to hear (all in Latin, and ending with *issimus*); though he threatened often, he punished seldom. His voice was *vox et præterea nihil*—gentle, and kind, and lamb-like, for all his loud voice and fierce talk; and the birchen rod that lay in the dusty cupboard behind him might have belonged to Doctor Busby, so long had it been in disuse.

Doctor Pantologos was a very learned man.—He could not measure lands nor presage tides and storms, nor did the rumor run that he could gauge; but he was as full of Latin, Greek, and Hebrew, as an egg is popularly said to be full of meat. He was a walking dictionary. A thesaurus in rusty black. A lexicon with a white neckcloth. Bayle, Erasmus, the Scaligers, Bentley, Salmasius, and the Scholiast upon *Everybody*, all rolled up together. The trees, clad with leafy garments to meaner mortals, were to him hung only with neat little discs, bearing derivations of words and tenses. The gnarled oaks had no roots to him but Greek roots. He despised the multiplication-table, and sighed for the *Abacus* back again. He thought Buffon and Cuvier, Audubon and Professor Owen, infinitely inferior, as natural historians, to Pliny. He had read one novel—the *Golden Ass* of Apuleius; one cookery-book, that of Apicius. Galen, Celsius, Esculapius, and Hippocrates, were the whole of the faculty to him. Politics were his abomination; and he deemed but three subjects worthy of argument—the bull of Phalaris, the birthplace of Homer, and the *Æolic Digamma*.

On this last subject he had written a work—a mighty work—still in manuscript, from which

he frequently read extracts, which nobody could understand, and which Borax the Sceptic declared the Doctor didn't understand himself. Either, said Borax the Ironical, the old Doctor was mad before he began the work, or he would go mad before he finished it. It was a wondrous book. Written on innumerable fragments of paper, from sheets of foolscap to envelopes of letters and backs of washing-bills. The title-page, and some half-dozen sheets besides were fairly copied out and ready for press. A Treatise on the Origin and History of the *Æolic Digamma* (with strictures upon the Scholiast upon Everybody, of course), by Thoukydides Pantologos, head-master at the Free Grammar School at Accidentium. Thus classically did he write his name: he was of the Grotian creed, and scorned the mean, shuffling, evasive Thucydides nomenclature.

Whenever things went contrariwise with the Doctor, he flew for consolation to the treatise.—He made a feint of not employing himself upon it in school-hours; but, almost every afternoon, and frequently in the morning, he would cry, after many uneasy pinches of snuff: "Boy! go to my domicile and fetch the leatheren satchel that lieth on the parlor table." Straightway would the boy addressed, start on his errand; for, though the Doctor's cottage was close by, it oft-times happened that the boy managed to find time for the purchase of cakes and apples—nay, for the spinning of tops and tossing of leatheren balls even, and for unlawful chivying round the worn old circular stone steps, surmounted by a stump; all that remains of the old cross of Accidentium. Back would the boy come with the famous leatheren satchel gorged with papers. Then Doctor Pantologos would dip his bony arm into it and draw forth a handful of the treatise, and would fall to biting his pen, and clenching his hands, and muttering passages concerning the welfare of the *Æolic Digamma*, and in a trice he would be happy; forgetting the din and the dust, the ruinous schoolroom, his threadbare coat, the misappropriated funds, and his inadequate revenue—forgetting, even, the existence of the three great plagues of his life, his sister Volumnia, his sister Volumnia's children, and the boy Quandoquidem.

Volumnia was the widow of a Mr. Corry O'Lanu, an Irishman and an exciseman, who had fallen a victim to his devotion to his official duties, having lost his life in "a difficulty" about an illicit still in the county Tipperary, much whiskey being spilt on the occasion, and some blood. To whom should the widowed Volumnia fly for protection and shelter but to her brother Thoukydides Pantologos? And Thoukydides Pantologos, whose general meekness and lamb-like-ness would have prompted him to receive the Megatherium with open arms, and acknowledge the *Plesiosaurus* as a brother-in-law, had he been requested so to do, did not only receive, cherish, aid and abet his sister Volumnia, but likewise her five orphaned children—Elagabalus James, Commodus William, Marius Frederick, Drusilla Jane, and Poppaea Caroline. They had all red hair. They all fought, bit, scratched, stole, and devoured like fox cubs. They tore the Doc-

tor's books; they yelled hideous choruses to distract him as he studied; they made savage forays upon the leatheren satchel; they fashioned his pens into pea-shooters, ate his wafers, and poured out his ink as libations to the infernal gods. In a word, they played the very devil with Doctor Pantologos. And Volumnia, whose hair was redder than that of her offspring, and in whose admirable character all the virtues of her children were combined, watched over this young troop with motherly fondness; and very little rest did she let her brother have night or day, if the bereaved orphans of Mr. O'Lanu wanted new boots, or socks, or frocks.

Mrs. O'Lanu had no money, no wit, no beauty, no good qualities to speak of, but she had a temper. By means of this said temper she kept the learned Doctor Pantologos in continual fear and trembling. She raised storms about his ears, she scolded him from doors and objurged him from windows, she put "ratsbane in his porridge and halters in his pew," (figuratively, of course,) she trumpeted his misdoings all over the village, and was much condoled with for her sufferings (a more harmless and inoffensive man than the doctor did not exist); she spent three-fourths of his small income upon herself and her red-haired children; yet Thoukydides Pantologos bore it all with patience, and was willing to believe that Volumnia was a martyr to his interests; that she sacrificed her children to him, and only stayed with him to save him and his house from utter rack and ruin.

Did I ever mention that, a great many years before this time, Doctor Pantologos took to himself a wife—a delicate lady who died—called Formosa, and who dying left a little child—a girl called Pulchrior? I think not—yet it was so; and at this time this child had grown to be a brown-haired, rosy-cheeked, buxom little lass, some fifteen summers old. It pleased very much Doctor Pantologos to remark that she was not weak, nor delicate, nor ailing, like the poor lady—her mother—who died, and that still she had her mother's eyes, and hair, and cheery laugh. She was a very merry good little girl was Pulchrior, and I am sure I don't know what the poor Doctor would have done without her. Volumnia hated her, of course. She called her "rubbage," a "fagot," and other unclassical names, which I am ashamed the widow of an O'Lanu should have so far forgotten herself as to make use of; poor Pulchrior had to do the hardest work, and wash and dress the five red-headed children, who always fought, bit, scratched, and yelled, during the operation; she had to run errands for Volumnia, notably with missives of tender nature addressed to Mr. O'Bleak, the squinting apothecary at the corner (Volumnia adored Irishmen): she had to bear all Volumnia's abuse, and all the turmoil of the infants with the red heads, but she did not repine. She had a temper, too, had Pulchrior, and that temper happened to be a very good one; and the more Volumnia scolded, and stormed, and abused her, the more Pulchrior sang and smiled, and (when she could get into a quiet corner by herself) danced.

Luckily, indeed, was it for Doctor Pantologos that Volumnia did not deem it expedient that

her red-headed children, the boys at least, should receive their education, as yet, in Accidentium Grammar-School. The fiery-headed scions of the house of O'Lanu passed the hours of study in simple and pastoral recreations, dabbling in the mud in the verdant ditches, making dirt pies, squirting the pellucid waters of the Dune through syringes at their youthful companions, or casting the genial brickbat at the passing stranger. Ah, happy time! Ah happy they! Ah happy, happy Doctor Pantologos!

Happy, at least, in school he might have been, notwithstanding the din, and the boys who couldn't and the boys who wouldn't learn—both very numerous classes of boys in Accidentium Grammar School—comparatively happy would the days have passed in the absorption of the treatise upon the *Æolic Digamma*, but for that worst of boys Quandoquidem. Quandoquidem was a big, raw-boned boy of fourteen. He had an impracticable head, incorrigible hands, and irretrievable feet. He was all knuckles—that is, his wrists, elbows, fingers, knees, toes, shoulders, hips and feet, all seemed to possess the property of "knuckling down," and bending themselves into strange angles. Quandoquidem was a widow's son, and his mother Veturia, who had some little property, dwelt in a cottage just opposite the dwelling of Doctor Pantologos, over against the old stone cross. Quandoquidem either could not or would not learn. He would play at all boyish games with infinite skill and readiness, but he would not say *hic, hec, hoc*. He could make pasteboard coaches, and windmills, and models of boats, but he could not decline *Musa*. He was the bane of the doctor's school-life—the plague, the shame, the scandal of the school. He was the most impudent boy. The rudest boy. The noisiest boy. He made paper pellets and discharged them through pogguns at the Doctor as he pored over the treatise, or, as oftentimes happened, took a quiet doze. He shod rats with walnut-shells and caused them to perambulate the camera studiorum. Doctor Pantologos, mild man, clenched his fist frequently, and looked at him vengefully, muttering something about the Proverbs of King Solomon.

I am coming to the catastrophe of Doctor Pantologos. One very hot drowsy summer's afternoon, it so fell out that the boy Quandoquidem, the widow's son, was called upon by Doctor Pantologos to say a certain lesson. Young Quidvétat, the attorney's son, had just said his as glibly as may be, and he, with *Quemadmodum*, and *Tom Delectus*, and *Bill Spondee*, with little *Charley Dactyl*, his fag and bottle-holder, were all gathered round the doctor's desk, anticipating vast amusement from the performances of the widow's son, who was the acknowledged dunce of the school. Of course, Quandoquidem didn't know his lesson—he never did; but on this summer's afternoon he began to recite it so glibly, and with so much confidence, that his erudite preceptor was about to bestow a large meed of praise upon him, when his suspicions being roused by a titter he saw spreading amongst the boys on the forms near him, he was induced to look over the brow of his magisterial rostrum or desk. The incorrigible Quandoqui-

dem had wafered the page of the book containing his lesson against the Doctor's desk, and was coolly reading it.

Now, it was extremely unlucky for Quandoquidem that the Doctor had been without the treatise all day, and that he had as yet sent no boy for it. If that famous *Opus* upon the *Digamma* had been at hand, the perusal of the title-page alone would, no doubt, have softened his resentment; but he was treatiseless and remorseless, and Quandoquidem read in his eyes that it was all up.

"Varlet," exclaimed the Doctor, in the lava voice, "Bos, Fur, Sus, Carnifex! Furcifer! Mendax! Oh puer nequissimus, sceleratissimus, nocturnissimus; unworthy art thou of the lenient cane, the innocuous ferula. Let Thomas Quandoquidem be hoisted. Were he to cry *Civis Romanum sum*, he should be scourged!"

Thus classically did the Doctor announce his dread design. The rod that might have been in the cupboard since Dr. Busby's time, was brought forth; and Thomas Quandoquidem, the widow's son, suffered in the flesh.

It was a very hot and drowsy summer's afternoon, and the school was dismissed. The afternoon was so hot and drowsy that Doctor Pantologos, who had been hot and drowsy himself since execution had been done upon Quandoquidem, began to nod in his arm chair, and at length, not having the treatise to divert his attention, fell fast asleep. He was not aware when he did so, that one boy had remained behind, sitting in a corner; nor that that boy was Thomas Quandoquidem; nor was he aware that that widow's son was gazing at him with a flushed face and an evil eye, and that he, from time to time, shook his knuckly fist at him.

When the Doctor was fast asleep, Quandoquidem rose and left the school house as softly as possible. He hastened as fast as he could—not to his mother's home, but to the domicile of Doctor Pantologos.

Volumnia was up stairs writing a tender epistle to Mr. O'Bleak. The red-headed children were all in the back garden, socially employed in torturing a cat. When Quandoquidem lifted the latch and entered the keeping-room, he found no one there but the little lass Pulchrior, who was sitting by the window, mending the Doctor's black cotton stockings.

Now, between Thomas Quandoquidem, the widow's son, and Pulchrior Pantologos, the motherless, there had existed, for some period of time, a very curious friendship and alliance. Numberless were the pasteboard coaches, models of boats, and silk-worm boxes he had made her. Passing one day while she was laboriously sweeping out the parlor, what did Quandoquidem do but seize the broom from her hand, sweep the parlor, passage, kitchen, and wash-house, with goblin-like rapidity, dust all the furniture, (there was not much to dust, truly), give Pulchrior a kiss, and then dart across the road to his mother the widow's house, shouting triumphantly. Thus it grew to be that the little lass, Pulchrior, thought a good deal of Quandoquidem in her girlish way, and did trifles of sewing for him, and blushed very prettily whenever she saw him.

"Miss Pulchrior, please," said Quandoquidem, in a strange hard voice, as he entered the keeping-room, "the Doctor's not coming home yet awhile, and he's sent me for his leathern satchel."

He looked so hot and flushed, his brow was so lowering and ill-boding, that the Doctor's little daughter was frightened. She could not help suspecting, though she knew not what to suspect.

"And did papa send you?" she began, falteringly.

"Miss Pulchrior," interjected Quandoquidem, as if offended, "do you think I would tell you a story?"

Pulchrior slowly advanced to the table, and took up the leathern bag containing the magnum opus of her father, Pantologos the erudit. She handed it to Quandoquidem, looking timidly in his face, but the eyes of the widow's son were averted. His hand shook as he received the parcel; but he hurriedly thanked her, and, a moment afterwards, was gone. Had Pulchrior followed him to the door, she would have seen that the widow's son did not take the road towards the grammar school; but that, like a fox harboring evil designs towards a henroost, he slunk furtively round a corner, and watching his opportunity, crept round the stone steps, across the narrow street, and so into his mother's cottage.

Pulchrior was not aware of this, because she did not follow the guilty Thomas: and she did not follow him because it occurred to her to sit down on a lowly stool and have a good cry. She cried she knew not why; only Tom (she called him Tom) was so different from his wonted state, and at the bottom of her heart there was a vague suspicion and terror of she knew not what. But, at the termination of the good cry she recovered her spirits; and, when the kettle began to sing for tea, she was singing too; albeit the insulting tongue of Volumnia upon the topic of buttered toast was enough to spoil the temper of Robin Goodfellow himself.

Doctor Pantologos slept in the great arm chair so long and so soundly, that the old woman with a broom, who came to give the cobwebs change of air, from the roof to the floor (she would as soon have thought of burning the schoolroom down, as sweeping them away altogether), had to stir him up with the handle of her household implement before she could awaken him. Then Doctor Pantologos arose, shaking himself and yawning mightily, and went home to tea.

That repast was not quite ready when he made his appearance; for the red-headed children having tortured the cat until it was mad and they were hungry, had made a raid upon the buttered toast, and had eaten it up. Then Volumnia had to abuse Pulchrior for this, which took some time, and fresh toast had to be made, which took more; so, the Doctor was informed that he would have to wait a quarter of an hour.

"Very well, Sister Volumnia," said the meek Doctor. "I hanker not so much after the flesh-pots of Egypt, but that I can wait. Ad interim,

I will take a pipe of tobacco, and correct my seventy-seventh chapter. Pulchrior, my child, the leathern satchel!"

"The satchel, papa!" cried his daughter; "why, you sent Tom—I mean Master Quandoquidem—for it."

"I sent—Satchel—Quandoquidem!" gasped the Doctor.

"Yes, and I gave it him an hour ago."

The Doctor turned with wild eyes to his luckless child. He clasped his forehead with his hands, and staggered towards the door. His hand was on the latch, when a burst of derisive laughter fell upon his ear like red-hot pitch.—He looked through the open window of his chamber, through the screen of ivy, and woodbine, and honeysuckle, and eglantine—he could have looked through the old cross had it been standing, but, it had been laid low, hundreds of years. He looked across its platform, right through the open window of the widow Venturia's cottage; and there he saw a red glare as of fire burning, and the boy Quandoquidem standing beside it with a leathern satchel in his hand, and his form reddened by the reflection like an imp of Hades.

Doctor Pantologos tried to move, but he could not. Atlas was tied to one foot, and Olympus to the other: Pelion sat upon Ossa a-top of his burning head.

The boy Quandoquidem drew a large sheet of paper from the satchel, and brandished it aloft. Had it been a thousand miles off, the Doctor could have read it. It was the title-page of his darling treatise. The horrible boy thrust it into the fire, and then another and another sheet, and finally the satchel itself.

"So much for the Digamma, old Pan!" he cried with a ferocious laugh, as he stirred the burning mass with a poker.

"Miserere Domine!" said Doctor Pantologos, and he fell down in a dead faint.

Volumnia and Pulchrior came to his assistance; and, while the former severely bade him not to take on about a lot of rubbishing old paper, the latter administered more effectual assistance in the shape of restoratives. The red-headed children made a successful descent upon the fresh buttered toast, and ate it up with astonishing rapidity.

When Doctor Pantologos came to himself he began to weep.

"My treatise! my treatise!" he cried. "The pride, the hope, the joy of my life! My son and my grandson, my mother, and my wife! Poverty I have borne, and scorn, and the ignorance of youth, and the neglect of the wealthy, and the insolence of this woman, and the ferocity of these whelps. Oh, my treatise! Let me die now, for I have no treatise!"

He could say nothing, poor man, but "treatise," and "Quandoquidem," and "Digamma," weeping pitifully. They were fain to put him to bed; and Volumnia, reserving for a more suitable occasion the expression of her sentiments relative to being called "a woman," and her children "whelps," went for Mr. O'Bleak the apothecary. But Pulchrior, somewhat mistrust-

ing the skill of that squint-eyed practitioner, sent off for Doctor Integer, who was wont to smoke pipes and play cribbage with her papa.

During the next fortnight, Doctor Pantologos drank a great deal of apple tea, and felt very hot, and talked much nonsense. He woke up one morning quite sensible, but with no hair on the top of his head—which was attributable to his having had his head shaved. He was very languid, and they told him he had had a brain fever.

Doctor Integer stood at the bottom of the bed, smiling and snuffing as was his wont. Pulchrior was standing on one side of the bed, smiling and crying at the same time, to see her father so well and so ill. On the opposite side, there stood a lad with a pale face, a guilty face, but a penitent face. He held in his hand a bundle of papers.

"I only burnt the title-page," he said in a low voice. "All the rest is as safe as the Bank."

"He has nursed you all through your illness," faltered Pulchrior.

"He has kept the school together," said Doctor Integer.

"Bonus puer!" said Doctor Pantologos, laying his hand on the head of Quandoquidem.

What they all said was true. Thomas the knuckly, had never intended to destroy the Doctor's treatise, and was grievously shocked and shamed when he saw how well his ruse had succeeded. Thomas Quandoquidem was a good lad for all his deficiencies in hic, hæc, hoc, and sedulously endeavored to repair the evil he had done.

The Vicar abandoning stone-breaking and heel-balling for a season, had undertaken to teach school during the Doctor's illness; and Quandoquidem, the erst dunc, truant, and idler, had become his active and efficient monitor, awing the little boys, shaming the bigger ones into good order and application, and introducing a state of discipline that Accidentium Grammar School had not known for years. No sooner was school over, every day, than he hastened to the bedside of the sick Doctor. And there was

no kinder, patienter, abler, usefuller nurse than Thomas Quandoquidem.

And where was the voluminous Volumnia.—Alas! the Doctor's fever was not a week old when she ungratefully abandoned him, and eloped with Mr. O'Bleak—red-haired children and all. Mr. O'Bleak forgot to settle his little debts in Accidentium, and Volumnia remembered to take, but forgot to return, sundry articles of jewelry and clothing belonging to the late Mrs. Pantologos. I said alas! when I chronicled Volumnia's elopement; but I don't think, setting aside the scandal of the thing, that her relatives grieved very much, or that the Doctor was with difficulty consoled, when she and her rubicund progeny took their departure.

Doctor Pantologos is now a white-headed patriarch, very busy still on the treatise, and very happy in the unremitting tenderness and care of his children. I say children, for he has a son and a daughter; the daughter Pulchrior, whom you know; the son, her husband, whom you know, too, though you would scarcely recognize the knuckly boy who could not say hic, hæc, hoc, in Thomas Quandoquidem, Esq., B. A., who went to Cambridge, and took honors there, and was appointed master of the Free Grammar School at Accidentium on the retirement of Doctor Pantologos. Thomas has written no treatises, but he is an excellent master; and, in addition, succeeded in stirring up an earl somewhere, who had twenty thousand a year and the gout, who stirred up some prebendaries somewhere, who stirred up a chapter somewhere, and they do say that the Free Grammar School at Accidentium has a sound roof now, and that its master has a larger salary, and that the boys are better taught and cared for.

Pleasant fancies! Thick-coming fancies! Fancies hallowed by memory which a dog's-eared Latin grammar on this bookstall—the inside of its calf-skin cover scrawled over with schoolboy names and dates—can awaken. But, the bookstall keeper is very anxious to know whether I will purchase "that volumn," and I am not prepared to purchase it, and the shadows melt into the iron business day again.

The Bible Society are carrying on active operations at the French camps at Boulogne; where their colporteurs are distributing the Scriptures to the French soldiery at almost nominal rates. The Society is also busily engaged in Turkey; where there has lately been an increased inquiry after the Bible. They have an agent at Bucharest; and the New Testament has been lately published in the Bulgarian language, under the superintendence of Dr. Henderson. In Spain they profited by the late disturbances to dispose of a considerable number of Bibles; and they are going to commence a vigorous campaign under the new constitution, which professes to secure civil and religious liberty to all parties and sects.

An English paper says that about two years ago an aquatic weed, previously unknown to

the boatmen, began to spring up in a part of the Chesterfield Canal, the water some time previous having become of a deep green color. The weed spread from its starting-point with amazing rapidity, and has now reached all the way between Worksop and Retford, and, unless something is done to stop its growth, the consequences to traffic must be serious. The time required to navigate a loaded boat between the two towns is nearly double what it was a few years ago, owing to this impediment. Besides being of rapid growth, the plant under pressure rolls up into great heaps the size of haycocks, so that boats are frequently brought to a complete standstill. Its lengthened stem, thickly set with small leaves, produces an immense quantity of flax-like fibres.

[Cannot paper be made of it?—LIV. AGE.]

From The Times, 23 Sept.

## WILL IT EVER BE POSSIBLE TO MAP A SMELL?

TO THE EDITOR OF THE EVENING MAIL.

SIR: I lately stated in your columns that, in my own opinion, the pernicious products of the bad air of sewers and such places might be made visible. I can now, with a great approach to truth, assert that a bad smell may be mapped, i. e. the organic atoms in it laid down on paper, so as to show their very outline. I will give my experiment and its result; I do so with the less hesitation, as it is one very easily made. An upright metal pipe, some four inches in diameter and ten feet high, was some months since placed as an air-shaft from a vault or cesspool, receiving daily additions of the worst animal matters. This shaft so far answered, that it carried the effluvia above the heads of passers-by. By means of four uprights of wood, cut to a level about half an inch above the orifice at the top of the shaft, a rest or platform was made, on which a piece of glass six inches square was laid, so as to cover over the said orifice, and yet leaving a narrow space for air to pass. This glass had been most carefully cleaned. Before it was laid on the platform, it was lightly smeared on the under side with some pure glycerrhine, procured for the purpose and carefully tested. A small weight on the upper side kept the glass in its place. It was left thus for eight hours, then taken down, and at once washed with distilled water, which had been submitted to test. Some half-dozen preparations were at once made from this washing, i. e. a few drops were enclosed in very thin glass cells, and hermetically sealed.

I have now studied these preparations with the utmost care, using a microscopic power of more than 600 linear, with the aid of excellent illumination, by one of the very best inventions for the purpose. The result was to show me that, even in the small portion of the infected or polluted fluid contained in each preparation, there were countless masses of animated active bodies. The commonest form was that of a simple circular cell, with a distinct nucleus; there were also beautifully distinct oval cells; some few fungi I recognized as of the same genus as those found on decaying vegetable matter. There were numbers of vibronia, small magot-shaped bodies, not like those found in vegetable infusions, with central lines of division, but broader in shape, rather longer, evidently of greater diameter, and more active, the motion being more rolling than vibratory. There were thousands of bodies shaped like mushrooms, the stalks of which twisted about as the umbrella-head revolved. One peculiar cell I found, but not in such great numbers; it was always the largest in the group, being about 4-7,000ths

of an inch long, nearly oval, well-defined outline, and the membranous sac easily made out by a little subduing of the light. I compared it with fungi in a preparation made from mould on meat; it was of a very similar character, but larger, and its contents more obscured from sight. These cells alone were in a state of repose, with the exception of the few vegetable ones of which I have spoken; the rest were all alive, or rather lively; and, though now in confinement some forty-eight hours, they continue so.

It is quite clear to the eye that the maggot-like forms are generated in the cells, for they may be seen *within them* and escaping from them. Very many of these cells were so small that they could have passed three-abreast between the spaces of a micrometer, ruled to give, with the power used, something under the 7,000th part of an inch. All these bodies are, in substance, homogeneous; I can detect nothing like organs within or without them; they are so far transparent that they appear within these outlines as white and luminous. I am familiar with monads, and I think with most of the infusoria; but I have never seen any corresponding with the form, action, and general character of these bodies. I have, within these few weeks, taken specimens of the vibrio from various sources; I can trace in them the characters ascribed, in various books, to the several species; I have caught them, in large numbers, in the air; but these, the product of the effluvia from the commonest of all very dirty matters, appear to me to be perhaps of the same genus, so far as to deserve to be ranked as scavengers; but yet a new species.

I had been led to believe, as I stated in my last, that glycerrhine might, when exposed to the rays of the sun or moon, itself so decompose as to produce the so-called vibrios. I have, by means that defied all such chance of deception, ascertained that, as the rule, wherever a glass arrests in the air any vegetable fungi, a very high microscopic power will discover with these great multitudes of these lively bodies. Fungi washed from the tomato, or from the mould on meat, with distilled water only, which has been boiled afresh in a glass tube, will give to view these same bodies.

That these creatures are in the atmosphere for some wise purpose I have no doubt; that they do, as it is written of them, act as nature's scavengers, I have no doubt; that their existence in the air is almost perpetual, I believe; for when and where is there season or locality in which some decaying process is not going on?

We may, probably, inhale these ordinary aerozoa in any number with impunity, perhaps with benefit; but I have my doubts as to man's power to inhale without injury, repeated draughts of the animated matter, which, I

now believe, forms an element of animal decomposition, and is given off in its effluvia. At all events, I think, if the public could be brought to see that which floats in what they smell from sewers and cesspools, they would be more careful in the removal of filth in such a way as to, as far as may be, limit the escape of its life-crowded atmosphere.

I trust these my crude experiments may be followed up by those who possess even more powerful instruments and greater opportunities for observation than I have. I have only sought to give the results of my attempts to shadow out my theory. I am more than ever satisfied that a diligent study of the organized products to be obtained in different conditions of the atmosphere would lead to more light than we at present possess with regard to the cause of epidemics. I am strengthened in my opinion by that given to me by one of the very first physiologists of the day.

But, Sir, let me add that, just in proportion as the experimental means I have used and pointed out are simple, so are they, unless used with the utmost care, liable to betray. In dealing with these minute matters, the utmost care must be taken to test every stage of the experiment; to see that none of the materials used are the parents of the things found. It is in vain to work the product of glasses used to trap the air with any powers less than those of the quarter-inch of the best makers; to see thoroughly, a 1-8th or 1-6th with good eye-pieces and good illumination is necessary. I am still sanguine that these experiments are in the right path to discover phenomena in nature's works which may prove most valuable; I see no reason why we may not make an approach to some ocular analysis giving the difference between various decaying matters as to their specific effect on the atmosphere; it would not surprise me if particles of scent — say, from the fox or civet — could be made apparent to the eye.

I am well aware that a great part of the value of my experiment will depend upon the question — does glycerrhine, when exposed to the air, so rapidly decompose as in a few hours to give out this amount of life? As I have found vibrios with vegetable fungi taken directly from the plant to the stage of the microscope, using only fresh boiled distilled water and *no glycerrhine at all*, I believe the bodies I have described are literally taken floating in the atmosphere; and when I see their dimensions, and find with them the form of well-known fungi, it does not surprise me.

INVESTIGATOR.

#### MR. CALHOUN'S DYING HOURS.

In the *N. Y. Churchman*, as well as in several of the secular papers, we meet — and in

all cases without comment — a very extraordinary sketch of the dying hours of Mr. Calhoun, which whatever pleasure it may give to those who look with contempt on the solemnities of religion altogether, or may have some particular reason for gratification at its humiliation in this special instance, cannot but cause unmixed pain not only to the sincere admirers of Mr. Calhoun, but to that still larger class who regard the sanctions of the next world as indispensable to the economy of this. The statement in question purports to emanate from Mr. Scovil, Mr. Calhoun's private secretary, and it commences by saying that during Mr. Calhoun's illness, the Rev. Dr. Butler, then the Chaplain of the United States Senate, and the Rector of the church of which Mrs. Calhoun was a communicant, called upon Mr. Calhoun, when the following conversation took place:

"I (Mr. Scovil) told him that Mr. Calhoun was very ill — 'too ill to see any one.' Mr. Butler replied:

"That is the very reason why he should see me. Will you have the goodness to announce me, and tell him I wish to converse with him as a minister of God in reference to his situation."

I hesitated an instant, and then remembering that *Mrs. Calhoun was a communicant in the Episcopal Church, of which Mr. Butler was pastor, I concluded, if I wished to stand well in her future regard, I had better forego my determination of sending off Mr. Butler*, and so I said, "wait a moment" and I left him standing at the front door while I returned to the bedside of Mr. Calhoun.

God bless his glorious soul! I see him now as I saw him then, his head propped up by pillows — his pale, emaciated, but stern and commanding eyes piercing as an eagle's, and fixed upon me as I entered the room. He knew I had been to see some one who called.

"Who is it?" he asked.

"Mr. Butler, sir."

"Why did you not bring him in at once? It is his right, as my colleague."

"It is not Senator Butler, sir."

"Butler? I don't know any other one — who is he?"

"It is the chaplain of the Senate, sir, Rev. Mr. Butler."

"What does he want?"  
"He says that he has heard that you are very low, and considers it his duty to come and talk to you about serious matters."

"Send him off about his business. To come to talk to me about his nonsense, and at such a time as this?"

"I went to the front door and informed Mr. Butler that Mr. Calhoun was too ill to see him."

"You certainly must be mistaken. Does he know it is me?"

I cut the matter short with a decided "Yes, sir, he does; and he says he don't want to see you, and I won't disturb him by going in again with your name!"

Rev. Mr. Butler left; and when I returned to the room the impudence of the call was still in his mind. His eyes were closed, but I heard

broken sentences, such as "To call on me for such a purpose!" "Young man, not half grown!" "Subject that I have thought of all my life."

According to Mr. Scovil's own statement, therefore, he thought it not unbecoming to caricature the message left by Dr. Butler, by giving it, when delivering it to the dying man to whom it was addressed, first a disrespectful and then a ludicrous turn. If his irreverence and his looseness of memory were such as to permit him to take such liberties as this both with the truth and with the eminent statesman of whom he was the attendant, we cannot but be pardoned for supposing that a still greater license has been exercised by him in giving Mr. Calhoun's reply, where he has had so much more margin as to time and so much less as to responsibility. And independently of this, those who know Mr. Calhoun's great personal sweetness and unselfishness of temper, will be loath to believe that even under the influence of the unfeeling speech which Mr. Scovil blurted out, he would have given way to language so coarse and so unworthy of his own lofty and gentle temper, as that Mr. Scovil details. That Dr. Butler called upon Mr. Calhoun during his illness, we have no doubt. That Mr. Calhoun was unable to see him, and was perhaps impatient at being disturbed, is very possible. But that Mr. Calhoun's reply given to us by Mr. Scovil is as much the production of the latter as was Dr. Butler's message to Mr. Calhoun, is a presumption about which those who either knew Mr. Calhoun or have read Mr. Scovil's statement, can have little difficulty in considering conclusive. And this opinion is by no means weakened by the discovery that Mr. Scovil, who during his illustrious chieftain's life, "in order to stand well in Mrs. Calhoun's regard," took up Dr. Butler's name, after Mr. Calhoun's death has not hesitated to so far forget his desire to "stand well" with that noble and true-hearted lady, as to inflict from pure wantonness, upon her widowed feelings, a blow perhaps the most galling which they could possibly receive.

Such indeed is the temper, and such the fidelity as to facts, which mark the assaults of scepticism upon the religion of Christ. And we have been induced to notice the passages now for this very reason. It is by weapons just of the temper as this, — just as poisoned and yet just as brittle, — that the popular mind is sought to be prejudiced against Divine truth. Alas! indeed, that it should have been thought necessary, in order to give a Sunday Institute set-off to the deaths of those illustrious statesmen who gave, in their last hours, the most solemn of all recognitions of the Christian religion, to have seized upon and circulated a story such as the present, at the sacrifice of the

feelings of so many, as well as of the sanctions of truth itself! And alas! that by such men the great truth should be so entirely forgotten, that even on the principle of the most meagre natural religion, it behoves all men, whether they be great or small, when it comes to be their lot to be summoned to their last account before the Judge of all men, to approach that majestic presence with the most profound awe and the most reverent humility.

We have so far treated Mr. Scovil's statement upon its own merits. Its worthlessness, we think, is thereby abundantly evidenced; but we feel ourselves at liberty to go further and to state, on the best living authority, that on no occasion did Mr. Butler ever give to Mr. Scovil any message to Mr. Calhoun whatever in any way connected with his last sickness.—*Episcopal Recorder.*

From Chambers's Journal.

#### SCIENCE AND ARTS.

THE past few weeks have been especially fruitful in matters electrical, some of which possess more than ordinary interest, and are striking instances of advance in scientific research. One is Dr. Watson's electric-light railway signal-lamp, which, as the inventor avers, can be seen at a distance of five miles through the densest fog. The ordinary lamps as is well known, are comparatively useless in thick weather; and if the new light be as penetrating as is asserted, it may do signal service in preventing such collisions as those by which we have been startled of late on certain lines of railway.

The electro-magnetic weaving-machine, which we have more than once mentioned, is growing more and more into a practical reality. The inventor, Cavaliere Bonelli, has sold his patent to two eminent banking firms at Turin and Lyons: models are soon to be exhibited in Paris and London, and in the United States; and no doubt is entertained that the machine will effect a great change in the weaving art. The invention is indeed one of the most remarkable applications of electro-magnetism to industrial purposes we have yet heard of. Most persons will remember the Jacquard-looms in the Great Exhibition, and the large perforated cards, or cartoons, which had to be shifted with every movement of the shuttle to produce the pattern. In the electro-magnetic loom, instead of cards, numbers of small iron bars are employed, arranged in sets according to the pattern; and these being in connection with the magnets, move obedient to the will of the designer, each time the shuttle leaves his hand. The movements are, of course, effected by a repeated making and breaking

of the magnetic current, aided by an instrument similar in construction to a comb, which strikes the bars at the required moment, and throws them in or out of position according to the nature of the design. It is in the 'comb,' we believe, that the pattern is first set, after which its reproduction is a mere question of time; but it reappears in the woven material as accurately as a message printed at one end of a telegraph-wire is repeated in print at the other. From these particulars we see that the new apparatus offers considerable advantages to the silk-weaving trade, and there is this further in its favor, that it may be fitted to Jacquard-looms at present in use. Some of the initiated say that tapestries and textile designs, however exquisite, will be so readily reproduced by the aid of electro-magnetism, as to supply the most beautiful materials for dress and decoration to all classes of purchasers. We may add here, that a new weaving-machine, called the 'appréteuse,' is about to be tried in the cloth factories at Leeds. It combines the principle of the 'gig' and 'shearing-machine,' and at Rouen, and some other manufacturing towns on the continent, has been found superior to any machine yet introduced for the same purpose.

Next comes M. Becquerel's new method of treating mineral ores, the result of twenty years' study, which, in two words, is electro-chemical. Every one knows that in the separation of metal from the earthy matters with which it is combined, certain processes are gone through, involving the use of quicksilver or of fire, as in smelting, cupellation, etc., varying according to the nature of the metal operated on. For all these, M. Becquerel proposes to substitute an electro-chemical action, by which he dispenses with them entirely. Seeing that his experiments have been made on more than 10,000 kilogrammes of ores of silver, copper, and lead, from Mexico, Peru, the Altai Mountains, and other parts of the globe, there is no question as to the attention due to the results. We must content ourselves with a brief outline of the process. The ore is first treated in such a way that its constituents shall be soluble in a solution of common salt at the maximum of saturation. In the case of galena the constituents are chloride of silver and sulphate of lead. When these are dissolved, the liquid is transferred to wooden vats or reservoirs, in which the decomposition of the metallic salts is effected by means of a galvanic-battery, the plates of which vary according to the nature of the metal to be thrown down—carbon in some instances being used for the negative. The battery being set in action, the operation, as a rule, is complete in twenty-four hours, but may be accelerated by the application of heat. 'Argentiferous lead gives up all its silver without the necessity for cu-

pellation; and ores the most refractory, such as blonde and gray copper, yield readily to this mode of treatment.' The experiments have all been satisfactorily confirmed by M. St. Clair, refiner of Mexico, who in his report dwells strongly on the fact, that the exhaustion of quicksilver-mines, long dreaded by American miners, need no longer be feared, as quicksilver will no longer be required in their operations. Only in places where common salt is very dear, would the electro-chemical process be too expensive to be profitable.

M. Becquerel has published a book containing a full account of his method; and we commend it to the notice of miners in this country, where the price of salt is no difficulty in the way of experiment, and where any means by which fuel and labor may be saved claim serious consideration.

A 'liquid purifier' has been invented by Mr. B. L. Phillips, which is understood to effect a great improvement in the manufacture of iron and other metals. It is introduced as a flux when the metal is in a state of fusion; and according to the *Mining Journal*, the result as regards iron is an increase in the strength of the bar by at least 16 per cent. Copper and brass have been experimented upon with equal success; and the *Birmingham Journal* states, that the purifier has been proved to add greatly to the crystalline and cohesive properties of glass.

The next is an instance of the employment of electricity in furtherance of astronomical science. Father Secchi, of the observatory at Rome, is carrying on an important series of magnetic observations, during which he has found in the movements of the bar-magnets a means of detecting the appearance of the aurora. Wishing to extend his researches to other celestial phenomena, he suggests calling in the aid of the electric-telegraph in the observation of shooting-stars. For instance: a meteor being seen at one observatory, information of the fact is to be instantaneously flashed to the next beyond, and so on, thus enabling two or more observers to notice the same object; and then, by subsequent comparison and calculation, to discover whether they all saw it at the same instant, and in the same part of the sky. These and some other points being ascertained, it will be possible to clear up certain doubts that now confuse the question of shooting-stars. From some few experiments made between Rome and Naples, Father Secchi believes the present notions on the subject to stand in need of rectification.

M. Deville is pursuing his task of extracting aluminum from clay with the most marked success—his latest achievements having been laid before the Academie in sheets, ingots, and medals, all of the new metal. M. Castels has discovered a way of making artificial quinine,

by a process not yet made public; but if the fact be as he states, a step is here gained in an important branch of chemistry which promises well for further discovery. Fresenius has done something towards preventing the incrustation of steam-boilers which is worth recording. Having observed that incrustation is due rather to sulphate than carbonate of lime, he throws soda into the water as a remedy, in the proportion of 78 of soda to 100 of the sulphate, and thus neutralizes the latter. "Take," he says, "a given quantity of water from the boiler, filtered if necessary, divide it into two portions, add to one a portion of soda, to the other a small quantity of lime-water. If the former remains clear while the latter becomes somewhat slightly turbid, the proportion of soda is correct; if the contrary, soda must be added; but if the lime-watered portion becomes very thick, then the soda must be diminished." This experiment is simple enough, and there appears to be no reason why it should not be tried wherever incrusted boilers are complained of.

The continued ravages of the vine-disease, and consequent increase in the price of wine, has led a Parisian chemist, M. Hoffmann, to seek for some vegetable substance from which alcohol might be distilled suitable as a beverage. After sundry trials, he found what he wanted in a gramineous plant, the *Triticum repens*, or couch-grass, the roots of which are known to be sweet and nourishing, though regarded by agriculturists as a noxious weed. This grass, when properly treated, yields a "colorless alcohol, of agreeable flavor, without any empyreumatic odor, and altogether analogous to that obtained from sugar." Whether it be desirable to increase the production of alcohol may admit of question; but as great quantities are needed for manufacturing purposes, farmers and others might find it worth their while to collect couch-grass for distillation, instead of burning it.

Foucault is again making the rotation of the earth visible to the eye, and with an apparatus that exhibits the phenomenon more palpably to the ordinary observer than did this famous pendulum experiment, which was so much talked of two years ago. The contrivance now used resembles, in its main features, the beam and wheel to which we drew attention last April; the wheel being made to rotate rapidly, sets in motion a second wheel moving slowly in a different plane. Gradually, as the movement continues, the axis of the latter places itself precisely in a line with the true meridian of the place where the experiment is tried, as is clearly seen by the spectator looking through a telescope fixed at a short distance off on the same floor. Stability and quiet are required for the success of the experiment, and M. Foucault has been

permitted to fix his apparatus in the Pantheon, where he demonstrates the rotation of the earth to numbers of admiring Parisians. There is more in this experiment than appears at first sight. It furnishes a means whereby the true meridian may be found in any part of the world, and thus the deviation of the magnetic meridian may be detected, the compass corrected, and the dangers from magnetic disturbance avoided. In fact, it is said, that with this apparatus properly fitted, a ship might go to sea without a compass; but as yet the difficulty of neutralizing the motion of a vessel on the waves presents an unsurmountable obstacle. From another quarter we hear of a machine which, fitted under the bottom of a ship, indicates by a dial on deck the rate of sailing; and of a "marine clock," that tells the latitude and longitude while the vessel pursues her course.

The great oceanic survey is advancing from discussion into real practice; the governments of Holland, Belgium, Portugal, and Prussia, complying with the recommendations of the "maritime conference" held last year at Brussels, have prepared lists of their ships to be employed in the observations, and issued the necessary instructions to their captains. These, with the United States and British vessels, which are already engaged in the work, will be able to make a good beginning in all latitudes, and is a task which pre-eminently requires the amplest co-operation.

While science is thus busy on the ocean, she is turning her attention to a rather delicate question on land. We do not yet know so much as we ought to know of the weight and mass of the earth, and the relation it bears in these particulars to the other planets. The question is one which has arisen again and again, in proportion with the growing sense that rigorous exactitude in scientific research is an indispensable condition; and attempts to solve it have been made in various ways—by swinging a pendulum in different latitudes, and by observations of the attraction of suspended balls. Some twenty-five years ago, certain eminent members of the Astronomical Society swung a pendulum at the top and bottom of the Dolcoath Mine, in Cornwall, but failed to arrive at any satisfactory conclusions—perhaps because of the flood which drove them from the lowest part of the mine before their second series of experiments was completed. Now, a new attempt is being made by the astronomer-royal, who, when he thinks a thing ought to be done, loses little time in setting about it. He has chosen the north for the scene of his experiments, and has set up his pendulums at the Horton Mine, at Shields, on the banks of the Tyne. The depth of the mine is 1200 feet; and as the pendulums are placed in electric communication with each other, we

may hope that it will be found possible to detect differences of the earth's action upon them, at the surface and far below it. These differences being determined, will furnish data for calculating the effect of different strata, and show what is to be allowed for geological structure, and what for density. Although these experiments may not solve the whole question, it is impossible not to wish them success, when we remember of what importance the answer will be to astronomical science.

A curious experiment has been made in France, apparently to show that swallows can be made to do the work of carrier-pigeons; for in these days of telegraph wires, any other object seems to be out of the question. Six swallows were carried to Vienna, where, a slip of paper, bearing a written communication, having been tied under the breast of each, they were let loose to find their way back again. It was seven in the morning when they started; two reached Paris at one in the afternoon of the same day; a third, between two and three; and the last, at four; while two of the six never made their appearance at all. Leaving this fact to speak for itself, and be accepted for what it may seem worth, we go on to remark that a project is talked of for laying a submarine wire from Corfu, or Cephalonia, to some Dalmatian port. Another attempt is being made to carry a wire from Holyhead to Howth; and six of our principal dockyards are in direct telegraphic communication with the Admiralty offices in London. Again has an attempt been made to send a signal through water without a wire; this time, at Portsmouth, where it was attended with partial success. The thing has often been tried; a few years ago, a couple of savans might have been seen sending their messages across those minor lakes known to Londoners as Hampstead ponds. It must not be reckoned among the impossibilities. An Aeronautical Society is on the tapis—to experiment on, and investigate the possibilities of aerial navigation. Not yet, we fancy, will Tennyson's vision of "argosies with magic sails" gliding through the heavens be realized. In a freestone quarry at Airdrie, nearly forty feet below the surface, a fossil tree has been found, with roots in some parts six feet thick. Some fossilized nuts were picked up in the same place, forming altogether a most interesting prize for geologists. Dr. Livingston, who, a year or two ago, made a remarkable exploration in Eastern Africa, has just been heard of at a place in Angola, 150 miles from the coast, to which he had travelled through the interior from the Cape of Good Hope. If this be true, the worthy missionary will have made one of the most successful journeys on record. Among the victims of cholera, we regret to see the name of Signor Melloni of Naples, so

well known for his researches into the radiation of heat, and for the soundness and originality of his views. His death is a real loss to science.

Captain Galton's report of railways, just published, shows the total length of finished railway in the United Kingdom in 1853 to have been 7686 miles, leaving more than 3000 miles still to be made. Nearly 6000 miles of the amount are in England. The total receipts in the same year were £18,035,872; and the number of passengers 102,286,660—being 13,000,000 more than in 1852. It is worthy of remark, that while the first and second class receipts show a decrease, those from third class passengers present a considerable increase. Perhaps it is for this reason that the third class carriages on the Great Western Railway are now improved into most comfortable and convenient vehicles.

The Commissioners of the Great Exhibition of 1851 have sent a circular to the authorities of the free museums throughout the kingdom, offering "to present to them collections of illustrative samples, amounting to some hundreds of specimens, and consisting chiefly of raw produce, taken from the trade collection." To which may be added the fact, that thirty-five certificates for proficiency have been granted by the Government Department of Science and Art to as many students. Is not this a sign that the schools are progressing?

Captain Penny's whaling-expedition to Davis's Strait, which we mentioned at the time of its sailing, has proved completely successful. It was undertaken with a view to see whether a resident establishment would not prove more profitable than the ordinary mode of fishing, and the two vessels which sailed in July last year, wintered at Kumsooka; and now the captain has come home with one of his ships, and the other is following—both full of oil, valued at £8000. There are deposits of plumbago and other minerals near the settlement, and it is possible that in time these may come to be worked in conjunction with the fishery, though it is but an inhospitable region for colonists.

The Commissioners of the Irish Fisheries, in their Report for 1853, give some particulars respecting the artificial production of salmon, which we have much pleasure in repeating here, as helping on a work the success of which will add so largely to the food resources of the nation. Having considered that the persons who rear the young salmon in the spawning-beds, should not lose the reward for their trouble on the migration of the fry to the salt water, the commissioners suggested the formation of a reservoir on the margin of the sea at Kingstown, which appears to have been effected, for they say: 'This may be termed a

sea-pond, 200 feet long by about 50 feet wide, and 6 feet deep at low-water. A rise of 6 or 7 feet occurs at every tide, flowing in through a grating placed across the entrance to confine the fish within. We took fry from the fresh waters of the Liffey and Bray rivers, at the proper age and migratory state, and have transferred them to this pond, where they can now be seen daily. They are watched by many persons anxious for the result of this experiment, and appear to be thriving well, and have increased considerably in size.

Very small fish pass in through the grating from the harbor, and the young salmon are seen feeding upon them. If, continue the commissioners—and we gladly support their suggestion—if this experiment should succeed in demonstrating that salmon may be thus successfully kept under control, until they attain to a size rendering them valuable in an edible point of view, innumerable enclosures may be made around the coast, varying in extent according to circumstances; and by these means, the artificial production of salmon may become of vast importance.

From the Examiner.

#### THE PROTESTANTISM OF CHINA.

As soon as the first news of the conversion of the insurgents of China reached us, we expressed our disbelief in it. We had not a particle of faith in the miracle by which the disciples of Fo, Confucius, and "the Queen of Heaven," were represented as having suddenly adopted—no one knew by what agency—the rational religion of Protestant Europe; for we knew that the Chinese, though the most industrious, are at the same time the most conceited, the most sensual, and the least impressive people of all Asia. The translation of a State paper of the insurgents, brought over by the last India mail, now lets us into the true character of the new religion; and it turns out to be no more Protestantism, or any other form of rational Christianity, than is the superstition of the gross and barbarous Abyssinians, who were nominal Christians for centuries before the conversion of the Anglo-Saxons, the Franks, or the Normans, the forefathers of the now most polished nations of Europe.

The State paper in question is of great bulk; but it is a big bushel of chaff, with but a very few grains of corn in it. One wonders indeed how a people who invented paper, printing, and porcelain, the discoverers of tea, of the arts of fabricating a beautiful tissue from the entrails of a caterpillar, and of manufacturing sugar from a grass, and who did all this two thousand years ago, when Greeks and Romans were completely ignorant of such

things, should be at this time of day so arrantly stupid and credulous as to believe in the farce of sense and nonsense of which this queer document is composed. We shall endeavor to give our readers some notion of it—no light task.

The life and soul of the insurrection is one Yang-seusing, whose title, according to the translation, is the "Eastern Prince." This personage is a prophet. Whenever convenient to him, he falls into a trance, whereupon he has communion with the Deity, who, like a Hindu Avatar, descends on earth to reveal his will to him. The women of his own family (so many Ayeshas), are implicit believers in his divine mission, and are instruments employed to inculcate its truth. The other chiefs of the insurrection are also either believers or connivers. All this is very much after the manner of the inspirations of the Arabian prophet, though the Chinese want the hot enthusiasm, the enterprise, the courage, and the poetry of the early Moslems.

But now comes the emperor on the scene. The prophet and his associates appear to have fabricated this emperor for the nonce, very much after the fashion that bees are said to do a queen when they have lost their old one; and naturally he appears to be a little better than a puppet in the hands of the prophet. But let us give each his due designation. The respective rank of the chief parties who enact the strange and to us very indecent drama, appears to be expressed by the domestic relation of elder and younger brothers, while the Supreme Being is designated the "Heavenly Father," a term obviously translated from the Gospel. The first elder brother in rank is Jesus; the second the Celestial King, that is the Emperor; the third, the Heir Apparent; and the fourth, the Eastern Prince, that is, the Prophet himself. The "Northern Prince," and other officers, are the "younger brothers."

Here, as a sample, is an account of the first descent of the Deity, premising, as to the date of the transaction, that the framers of the new religion seem to have adopted the Jewish, instead of the Christian sabbath, whether by mistake or design does not appear.

On the morning of the 25th December, 1853, being the day of worship, the Northern Prince, accompanied by the Marquis Tingheen, the Minister of State, and other officers, came to the palace of the Eastern Prince, (the Prophet) to pay their compliments and to deliberate on the affairs of Government. When the deliberations were completed, the Northern Prince (the General) with all the officers, knelt down and exclaimed, "May your highness the Eastern Prince enjoy felicity and repose!" The Eastern Prince then commanded the Northern Prince to return to his palace, and all the officers to repair to their official residences, after which the Eastern Prince retired to his inner palace. In

a short time the Heavenly Father came down into the world, and summoned Yangshway-keao, Hoo-kan-keao, Tan-wan-me, and Sang-wan-me, saying, "Do all you young women come forward and listen to the commands of me, the Heavenly Father," (ladies of the Prophet's Family). Yangshway-keao, together with the female chamberlains, then approached into the presence of the Heavenly Father, and kneeling down, inquired, saying, "since the Heavenly Father has taken the trouble to come down into the world, we young women have all come forward reverently to listen to the Heavenly Father's sacred commands, and to solicit his instructions." The Heavenly Father then manifested considerable displeasure, and for some time would not speak. The female officers implored, saying, "The moving of our Heavenly Father to take the trouble to come down into our world is to be ascribed to the faults of his sons and daughters, whose transgressions are multiplied. We, therefore, earnestly beseech our Heavenly Father's forgiveness, and entreat the removal of his displeasure, for which we pray, and pray again, with all imaginable earnestness." The Heavenly Father then said, "Since you little ones are sensible of your faults, do you immediately call your Northern Prince to come hither and listen to my commands." The female chamberlains then replied, "We will obey the Heavenly Father's sacred commands." The female chamberlains then hastened out of the door of the second palace, and sounded the drum, announcing the descent of the Heavenly Father, and informing the male chamberlains that the Northern Prince had been summoned into his presence. The male chamberlains, in obedience to the orders given, went immediately to the Northern Palace to make this announcement. The Northern Prince then came to the Eastern Palace to listen to the sacred commands of the Heavenly Father, who had come down into the world. The Heavenly Father also commanded the female Minister of State, Yangshway-keao, and Hoo-kan-me, saying, "Before the arrival of your Northern Prince I command you to take my sacred will, and announce it to your Eastern Prince, commanding him to go to court, and inform your Lord, the Celestial King, that my appearance is on account of the impetuous disposition of your Lord, the Celestial King. Since he is of the same nature with myself, he ought to be as forbearing as myself."

On one occasion, the Celestial King, for some offence or another not named, but probably for some irregularities in his household, is threatened with the Chinese panacea of the bamboo, and escapes the infliction only by a full admission of his un-named sins. The following is the account given of the interposition of the Deity in this matter:

The Eastern Prince again said, "The Heavenly Father has made known his sacred will commanding us all to go to Court; we ought, therefore, to proceed thither immediately." Having said this, he told them to wait a little, and the Northern Prince, together with the officers, knelt

down and shouted, "May your Highness enjoy abundant longevity! We beseech you, the Eastern Prince, tranquilly to ascend your sedan chair." The Eastern Prince then commanded the Northern Prince and all the officers to go first to Court. The Northern Prince was about to proceed thither accordingly, when he suddenly addressed the Chamberlain of the Northern Palace, saying, "Do you quickly go to the sedan of the Eastern Prince, and request the favor of his instructions, as to whether we are first to go to the Hall of Audience, or to enter straight into the door of the palace." The Chamberlain, receiving this charge, went immediately to the sedan of the Eastern Prince, and requested one of the servants of the Eastern Palace to obtain and communicate to him the wishes of his master. The servant said, "The Eastern Prince is enjoying repose in the sedan, and I do not dare to disturb him." The Chamberlain of the Northern Palace, hearing that the Eastern Prince was enjoying repose, did not presume to repeat the inquiry, but hastened back to inform the Northern Prince.—The Northern Prince hearing that the Eastern Prince was enjoying repose, hastily descended from his sedan and proceeded on foot to the middle of the road, where he knelt down and inquired, saying, "Has the Heavenly Father troubled himself to come down into this world again?" To which the Heavenly Father replied in the affirmative, telling the Northern Prince to convey the sedan into the Hall of Audience. The Northern Prince replied, "I will obey the injunctions of the Heavenly Father," whereupon he hastily commanded the female officers of the Court to inform the Celestial King of the circumstance, which done, he, together with the Ministers of State and the other officers, conveyed the sedan of the Eastern Prince within the gates of the palace. The Celestial King, Thae-ping-wang, having heard the message which the female officers brought from the Northern Prince, intimating that the Heavenly Father had taken the trouble to come down into the world, hastily went on foot to the second gate of the palace, to receive the Heavenly Father. The last named, on his arrival, was angry with the Celestial King, saying, "Sewtseun! You are very much in fault; are you aware of it?" The Celestial King kneeling down with the Northern Prince and all the officers, replied, saying, "Your unworthy son knows that he is in fault, and begs the Heavenly Father graciously to forgive him."—The Heavenly Father then said, with a loud voice, "Since you acknowledge your fault, you must be beaten with forty blows." At that time the Northern King and all the officers prostrated themselves on the ground, and, weeping, implored the Heavenly Father to manifest his favor, and remit the punishment which their master had deserved, offering to receive the blows themselves in the stead of the Celestial King. The Celestial King said, "Do not my younger brethren rebel against the will of our Heavenly Father? since our Heavenly Father has of his goodness condescended to instruct us, I, your elder brother, can do no less than receive the correction." The Heavenly Father would not listen to the request of the officers, but still insisted on

the blows being given to the Celestial King, whereupon the Celestial King replied, "Your unworthy son will comply with your requisition;" and, so saying, he prostrated himself to receive the blows. The Heavenly Father then said, "Since you have obeyed the requisition, I shall not inflict the blows: but those women, Shih-ting-lan and Yang-chang-mei, must both be sent to the palace of the Eastern Prince, and stay along with the Imperial relatives, to enjoy Royal ease and tranquillity. There is no necessity for their aiding in the business of the state. The elder and younger Chow-kew-choo, having formerly attained to a degree of merit, may also enjoy ease and tranquillity. With regard to other matters, you can wait till your brother Yang-sue-tsing sends up his report." Having said this, the Heavenly Father returned to heaven.

The translator gives a note in explanation of this transaction, which is equally an explanation of the other inspirations of the Prophet.

The Eastern Prince (the Prophet), says he, it appears had seated himself in his sedan, and was about to proceed to the Court of Thae-ping-wang, when it was said, all of a sudden, that he was enjoying repose; which means, that he had fallen into a trance. While in that state it is pretended that the Heavenly Father had taken possession of his body, and, without the individual affected being conscious of the fact, he says and does things which are supposed to be the sayings and doings of the Heavenly Father.—The Northern Prince seems to have been aware of the supposed possession as soon as he heard of the repose of the Eastern Prince, and therefore alighted from his chair, knelt down in the middle of the road, and asked if the Heavenly Father had come down. The colloquy that ensued was between the Eastern Prince (personating the Heavenly Father) and the Northern Prince. The trance over, exhaustion succeeded, and the Eastern Prince was informed of what had happened, of which he himself pretended to be unconscious. Such pretended possessions are common in China.

But besides these special revelations, it would seem that whatever comes from the Prophet must be considered as the injunctions of the divinity. This is plainly stated in a colloquy between the Prophet and the Emperor, of which the following is a sample:

The Celestial King then said, "That which you, my younger brother, have said is very right, and is truly in accordance with the benevolent feeling displayed by our Heavenly Father, who loves what is good, and hates what is evil, while he carefully discriminates between the one and the other. The disposition displayed by me, your elder brother, is impetuous, and if you, my younger brother, had not made this suggestion, it is to be feared that I should have wrongfully put some persons to death. Now, in consequence of your advice, not only shall I be prevented from wrongfully inflicting condign punishment, but future generations, observing this our exam-

ple, will not dare to do anything rashly. From henceforth, therefore, I, your elder brother, will in every case consult with you, my younger brother, before I proceed to act. It will have the effect also of inducing future Princes to imitate their predecessors, and consult with virtuous Ministers before they decide on action, by which means they may possibly prevent mistakes."

The Eastern Prince also said.—"This suggestion is not what I, your younger brother, could have thought of spontaneously; it is solely in consequence of the regeneration of mind conferred by our Heavenly Father and celestial elder brother: it is also to be ascribed to the kind consideration displayed by you, my second elder brother."

The Celestial King further said,—"What you have now suggested is very right; let it be recorded, therefore, for the instruction of future ages, that throughout all generations sovereigns and subjects may act according to this plan, and thus, perhaps, the intention of our Heavenly Father in fostering human life will be perpetually displayed, and the spirit of gentleness and tranquillity be handed down, world without end."

The Eastern Prince said, "In this way, also, the intelligent virtue of you, my second elder brother, will be everlasting established, and your example will be truly lovely and worthy of imitation."

The Eastern Prince further said,—"All you who are officers, when you meet with inferior officers coming to report some case to you in a respectful manner, no matter whether he be in the right or not, you should wait until he has reported it clearly; you must not, on any account, while he is in the middle of his report, on finding some impropriety in his expressions, bawl out and rail at him until he lose his presence of mind, for when people get alarmed they are likely to commit more errors. But you must wait until he has done speaking, and then quietly tell him what is right. If you do not, it is to be feared that when he has anything to say which is right and proper he will not dare to make it known."

The Heavenly King then gave orders to all the officers, saying, "All you officers must mind what the Eastern Prince says, which is all one as if it were addressed to you by the Heavenly Father; you must all reverently obey." To which all the officers replied,—"We will comply with your commands."

In his character of Vicegerent of the Deity, the Prophet gives much good advice to his sovereign, not forgetting the domestic administration of his household.

With respect to the female apartments (says he), Royal reformation must begin there. The Palace is a fountain from which all government springs; hence he who wishes to illustrate intelligent virtue throughout the empire will first regulate his country, and he who wishes to have his country well regulated will first put his family in order. At present, through the favor of our

Heavenly Father, the number of ladies at Court is very great, the daughters of the Prince are also very numerous; it will not, therefore, be right to listen only to the statements of the elder ladies, and not give heed to the complaints of the younger ones; still less would it be right to mind the prattle of the younger branches of the Royal family, to the exclusion of the remonstrances of the elder ones. In every case you should allow both parties to make their statements clearly, and thus you may decide between them as to which party is in the right and which in the wrong, without showing any partiality to either. When the ladies wait upon you, my elder brother, it is of course their duty, but sometimes they may be apt to excite your righteous displeasure, in which case you must treat them gently and not kick them with your boot on, for, if you kick them with your boot on, it may be that some of the ladies are in such a state as to call for the congratulations of their friends, and thus you interfere with the kind intentions of our Heavenly Father, who loves to foster human life. Further, when any of the ladies are in the state above alluded to, it would be as well to manifest a little gracious consideration, and allow them to rest from their labors, while you select some separate establishment for their residence and repose. You may still require them morning and evening to pay their respects. Such a method of treatment would be proper; and, if still any of the ladies should commit any trifling fault, so as to give offence to my Lord, it would be as well to excuse them from being beaten with the bamboo. You may, however, scold them severely, and tell them not to offend any more. Should any of them commit any grievous crime, you should wait till after their confinement, when you can inflict punishment. The Celestial King then praised his adviser, saying, "Your observations, brother Tsing, are all important, and may be considered the specifics for managing families, governing countries, and ruling the whole empire." The Eastern Prince replied, "That which I have just observed is what Princes would not of themselves think of; hence the necessity of a faithful Minister to report."

Our Chinese Prophet, moreover, not content with the rank already blasphemously assumed, has affixed to his other titles that of the Comforter, or the Holy Ghost, and this from a hint thrown out by his own self-made Emperor, in the following passage of consummate, though most probably unintentional, blasphemy:

The Celestial King said, "That which you, my brother Tsing (the prophet) have reported may be considered an important specific and a precious remedy, every word of which is consistent with the highest reason, and fit to be preserved as a rule for succeeding generations. When our Celestial elder brother Jesus, in obedience to the commands of our Heavenly Father, came down into the world, in the country of Judea, he addressed his disciples, saying—'At some future day the Comforter will come into the world.' Now I, your second elder brother, considering what you, brother Tsing, have reported to me, and observing what you have done, must conclude that the Comforter, even the Holy Ghost, spoken of by our Celestial elder brother (Christ) is none other than yourself!"

This new religion of the insurgent Chinese, in short, seems to us to have been adopted chiefly as a political engine, and, hitherto, not unprofitably. For can we doubt that it has proved a powerful auxiliary, when we see its followers depriving masters of two centuries' standing of one-half of an empire of three hundred and sixty millions of people, with every prospect of soon getting the remainder? It is earnestly to be hoped, however, that in due time it may produce better sacred fruits, for in its beginning there can be no question that it is Christianity only in name, and that under it are perpetrated the very same atrocities as under the worship of Buddha or Confucius.

From Fraser's Magazine.

#### PSYCHOLOGICAL INQUIRIES.\*

KNOW THYSELF, said the wise Grecian — a simple but significant form of words, worthy, from its pregnant brevity, of the place which it occupied over the portico of the Delphic temple. Self-knowledge is the first step towards the attainment of that greatest of all sciences — the science of human nature; and the mutual relations of the physical organiza-

tion and the mental faculties form a problem which must be solved, so far as it is capable of solution, at the very threshold of the investigation.

Some points may be considered as established with a sufficient degree of certainty; there are others as to which opinions may reasonably differ; while there is still a greater number of others as to which we must be content to acknowledge that, with our limited capacities, we have no means of forming an opinion at all.

When we read the last sentence, extracted from the advertisement of the valuable book before us, we felt satisfied that the volume was the production of no ordinary mind, but that

\* "Psychological Inquiries: in a series of Essays, intended to illustrate the Mutual Relations of the Physical Organization and the Mental Faculties." London: Longman, Brown, Green, and Longmans, 1854.

it proceeded from a writer fully aware of the great difficulties of his subject, and honestly confessing them. Every succeeding page satisfied us that the author had brought to his interesting task talents and experience of no common order.

With every wish to respect the feelings which induce an author to conceal his name, we could not long hesitate, in this case, before we pronounced it aloud in our solitary study. The mask is worn very loosely. We think we do know the fine Roman initials subscribed to the "Advertisement" aforesaid, and can trace the able hand that guided the pen, and that has relieved so much human suffering, as belonging to one long in the front rank of surgical science, and now the foremost man among the helpers of men.

This searching treatise is in the form of dialogue ; and, in our opinion, is one of the best published in that form since the appearance of the late Sir Humphrey Davy's *Consolations in Travel*. You soon discover whether a supply comes from a stream or a tank ; and it is quite refreshing in these reservoir-days to find yourself in the presence of a fountain clear and sparkling as that of Blandusia. None could have written well on this intricate subject without great knowledge of disease and of mankind ; and none could have been better qualified to discuss it than " B. C. B."

The plan of the work is this : Ergates and Crites go down at that season when members of parliament begin to live for themselves and grieve to die, as visitors to their friend Eubulus, who had retired from active life to a property which he possessed at the distance of a hundred miles from the metropolis. But Ergates shall describe it : —

Our friend's house had been built in the seventeenth century, and like many country houses of that date, was in a low situation, with a very limited prospect. But this defect was compensated by the beauty of the surrounding country, which exhibited all that variety of picturesque scenery which a varied geological structure usually affords. On one side were steep and lofty chalk hills, covered by a scanty herbage, and dotted with yews and junipers. On another side was a still loftier hill, but of a more gradual elevation, composed of sand with a thin soil over it, and covered with heath, with some clumps of Scotch firs scattered here and there. In the intermediate valley there were fields and meadows, with stubble and green pasture, and intersected by a stream of water ; while at the foot of the chalk hills, and at no great distance from the house, there was an extensive beech wood, which, from the absence of underwood, and the magnitude and height of the trees, with their branches mingling above, might be compared to an enormous cathedral, with its columns, and arches, and " dim religious light."

To a congratulation on the luxurious " per-

fect leisure" enjoyed by the master of the house, he acknowledges, in reply, that he has reason to be grateful for many blessings. " But do not," says he, " speak of perfect leisure as one of them." To a mind of any activity, idleness is terribly hard labor. Even to those who have been brought up in that listless condition, a life of leisure is, as Eubulus truly observes, bad enough. When a man is idle, we know what personage is on the watch ready to set him to work ; nor can we imagine a more useless or a more wretched being than a man without business, or profession, arts, sciences, or exercises.

But if, observes Eubulus to Ergates, a life of leisure be painful to persons who have been brought up in idleness, —

What must it be to one like you or me, who have advanced beyond the middle period of life, without having had any experience of it ? This is no speculative inquiry ; it may be answered from actual observation. Not a few persons who abandon their employments under the impression that they will be happy in doing so, actually die of ennui. It induces bodily disease more than physical or mental labor. Others, indeed, survive the ordeal. But, where the body does not suffer, the mind often does. I have known instances of persons whose habits have been suddenly changed from those of great activity to those of no employment at all, who have been for a time in a state of mental excitement or hypochondriasis, bordering on mental aberration. Moreover, it is with the mind as it is with the body—it is spoiled from want of use ; and the clever and intelligent young man, who sits down to lead what is called a life of leisure, invariably becomes a stupid old man.

Truer words were never written. Even the retired tallow-chandler begged, in his despair, to be allowed to revisit the establishment which he had left, on *melting days*, and derived some consolation from the permission — such consolation as a ghost may be supposed to derive from haunting the scene of its former pleasures. But, even refined pursuits will pall on the intellectual palate. Study, drawing, music, writing, soon lose their zest : " one cannot always be dancing, nowther," as the boatswain said. No, there must be some peremptory occupation : something that is your master, to give relish to the *holiday* : *Il faut cultiver notre jardin.*

Eubulus, after noticing the pastimes to which the cabbage-planting Diocletian and the self-flagellating Charles the Fifth were reduced, thus continues : —

But I suspect that, in spite of his misfortunes, Lord Bacon was not altogether unhappy while engaged in completing his philosophical works ; and I cannot doubt that he was much less so than he would have been if he had shared the occupations and amusements of the Emperors.

To this, Crites objects that Lord Bacon could not have been wholly and entirely occupied in the way mentioned, but that he must still have had many hours of leisure on his hands; and Eubulus replies :—

That is true. A man in a profession may be engaged in professional matters for twelve or fourteen hours daily, and suffer no very great inconvenience beyond that which may be traced to bodily fatigue. The greater part of what he has to do (at least it is so after a certain amount of experience) is nearly the same as that which he has done many times before, and becomes almost matter of course. He uses not only his previous knowledge of facts or his simple experience, but his previous thoughts, and the conclusions at which he had arrived formerly; and it is only at intervals that he is called upon to make any considerable mental exertion. But at every step in the composition of his philosophical works Lord Bacon had to think; and no one can be engaged in that which requires a sustained effort of thought for more than a very limited portion of the twenty-four hours. Such an amount of that kind of occupation must have been quite sufficient even for so powerful a mind as that of Lord Bacon. Mental relaxation after severe mental exertion is not less agreeable than bodily repose after bodily labor. A few hours of *bona fide* mental labor will exhaust the craving for active employment, and will leave the mind in a state in which the subsequent leisure (which is not necessarily mere idleness) will be as agreeable as it would have been irksome and painful otherwise.

We have heard physiologists, speaking on the labor of thought, declare that every effort consumed—burned, as it were—a portion, of the vigor of the brain; and that where the mental labor has been long and excessive, the nervous fluid of the over-worked organ has been deteriorated, and, in aggravated cases, utterly impoverished.

To an inquiry, by Crites, what limits may be placed to exertion of the kind above alluded to, Eubulus refers to the impossibility of laying down rules in that respect more than for the body; so much must depend on the original powers of the mind, the physical condition of the individual, and his previous early training; but he instances Cuvier as having been usually engaged, for seven hours daily, in his scientific researches, these not having been of a nature to require continuous thought; and Sir Walter Scott as having devoted about six hours daily to literary composition, and then his mind was in a state to enjoy lighter pursuits afterwards. When, however, after his misfortunes, he allowed himself no relaxation, there can be little doubt, as Eubulus observes, that his over-exertion contributed, as much as the moral suffering he endured, to the production of the disease of the brain which ultimately caused his death.

One day, when he was thus exerting himself beyond his powers, Sir Walter said to Capt. Basil Hall—who also suffered and died from disease in the brain :—

“ How many hours can you work ? ”

“ Six,” answered the captain.

“ But can’t you put on the spurs ? ”

“ If I do, the horse won’t go.”

“ So much the better for you,” said Scott with a sigh. “ When I put on the spurs, the horse *will* go well enough; but it is killing the horse.”

The whole of the observations on the limits of mental exertion, the source of mental fatigue, and on the imagination in waking and in sleep, are most instructive. Take this illustration of the difference between attention and thinking :—

Mere attention is an act of volition. Thinking implies more than this, and a still greater and more constant exercise of volition. It is with the mind as it is with the body. When the volition is exercised, there is fatigue; there is none otherwise; and in proportion as the will is more exercised, so is the fatigue greater. The muscle of the heart acts sixty or seventy times in a minute, and the muscles of respiration act eighteen or twenty times in a minute, for seventy or eighty, or in some rare instances even for a hundred successive years; but there is no feeling of fatigue. The same amount of muscular exertion under the influence of volition induces fatigue in a few hours. I am refreshed by a few hours’ sleep. I believe that I seldom, if ever, sleep without dreaming. But in sleep there is a suspension of volition. If there be occasions on which I do not enjoy the full and complete benefit of sleep, it is when my sleep is imperfect; when my dreams are between waking and sleeping, and a certain amount of volition may be supposed to be mixed up with the phantoms of the imagination.

When awake, we can arrest the current of the imagination, unless we indulge in one of those reveries or waking dreams when we give the reins to our imagination and build or visit our castles in Spain; and even then we do not lose all control. But in the ordinary waking state —

Our minds are so constructed, that we can keep the attention fixed on a particular object until we have, as it were, looked all around it; and the mind that possesses this faculty in the greatest degree of perfection will take cognizance of relations of which another mind has no perception. It is this, much more than any difference in the abstract power of reasoning, which constitutes the vast difference which exists between the minds of different individuals. This is the history alike of the poetic genius and of the genius of discovery in science. “ I keep the subject,” said Sir Isaac Newton, “ constantly before me, and wait until the first dawnings open

by little and little into a full light." It was thus that, after long meditation, he was led to the invention of fluxions, and to the anticipation of the modern discovery of the combustibility of the diamond. It was thus that Harvey discovered the circulation of the blood, and that those views were suggested to Davy which are propounded in the Bakerian lecture of 1806, and which laid the foundation of that grand series of experimental researches which terminated in the decomposition of the earths and alkalis.

And it was thus that Owen arrived at the conception of the archetypa and those views which are working an entire change in anatomical teaching.

Those dreams in which conversations or arguments are held with other persons, when the dreamer must invent the arguments used against himself without being aware that he has done so, naturally lead to the consideration of Dr. Wigan's somewhat ponderous but very ingenious volume, *On the Duality of the Mind* (1844), published to prove that each hemisphere of the cerebrum has a separate mind, and that on such occasions the two hemispheres might be considered as conversing with each other—a captivating theory, which we have heard supported by some who had read the book, and declared that they felt, especially in determining some difficult question where the *pros* and *cons* were nearly balanced, conscious of two antagonistic internal powers, each advocating, as it were, opposite sides of the question. But they were obliged to confess that they ultimately decided the question; and when reminded that there must then have been a third mental power to give judgment after weighing the opposite arguments, if the theory were well founded, acknowledged the force of the observation, and thereafter valued the Doctor's work more for the many curious illustrations of mental phenomena therein contained, than for the conclusion extracted from them. No, we agree with Eubulus in thinking that Père Buffier has disposed of this heresy, and clearly made out "the oneness and individuality of the mind."

And so the dialogue proceeds, gradually attaining to "thoughts more elevate," without ever losing sight of the fact that man is an animal; though we could mention an author of no mean attainments, who wrote a system of zoology and left the plumeless biped out, considering him altogether as a superior being, who was not to be degraded to a place in it.

The influence of enthusiasts and crazy fanatics over the masses is well touched. There are "epidemics of opinion as well as of disease, and it is, indeed, a melancholy fact that a great extension of education and knowledge does not produce any corresponding improvement in this respect. A half-mad man could set on foot a moral epidemic, and lead a mob

to destroy Newgate, gut the houses of the most intellectual and elevated persons, and nearly burn down London. Such moral epidemics are more destructive in their way than typhus, small-pox, or the much-dreaded cholera. But let not the age of table-turning and spirit-rapping smile at the dupes of Peter the Hermit, Lord George Gordon, Joanna Southcote — herself, we verily believe, the dupe of her own imagination — and Joe Smith. Without giving any opinion on the subject, we may at least observe that the subscribers to the Mesmeric Hospital have no right to curl the lip at the sympathetic-powder of Sir Kenelm Digby.

Upon the subject of Education we entirely agree with Eubulus. Crites asks: —

But does not what you have now stated tend to show that there is some defect in modern education? Might it not do more than it does towards the improvement of the reasoning faculty?

*Eubulus.* I doubt it. Education does a great deal. It imparts knowledge, and gives the individual worthy objects of contemplation for the remainder of his life. It strengthens his power of attention; and such is especially the case with the study of mathematics; and in doing so it cannot fail, to a certain extent, to assist the judgment. Still it seems to me, that to reason well is the result of an instinct originally implanted in us, rather than of instruction; and that a child or a peasant reasons quite as accurately on the thing before him and within the sphere of his knowledge as those who are versed in all the rules of logic. With regard even to mathematics, I much doubt whether they tend to improve the judgment on those subjects to which they are not immediately applicable.

Without going so far as Dugald Stewart, who observes, that in the course of his own experience, he had never met with a mere mathematician who was not credulous to a fault, not only with respect to human testimony, but also in matters of opinion, we think that there is a great deal of truth in the observation. To say nothing of Sir Isaac Newton, and others whose minds, powerful as they were, were prone to credulity, we could name one of the ablest mathematicians of the day, who is said to believe that he can communicate with disembodied spirits. Eubulus well explains this somewhat startling phenomenon: —

The principal errors of reasoning on all subjects beyond the pale of the exact sciences arise from our looking only on one side, or too exclusively on one side, of the question. But in mathematics there is no alternative. It has nothing to do with degrees of probability. The truth can be on one side only, and we arrive at a conclusion about which there is no possibility of doubt, or at none at all. In making these observations, however, do not suppose that I do not sufficiently estimate this most marvellous science

which, from the simplest data, has been made to grow up into what it now is by the mere force of the human intellect; the truth of which would have been the same if heaven and earth had never existed; would be the same still if they were now to pass away; and by means of which those branches of knowledge to which it is applicable have been brought to a state of perfection which others can never be expected to attain.

Nothing can be more fairly put than the following, which we recommend to the especial attention of parents and guardians: —

A high education is a leveller, which, while it tends to improve ordinary minds, and to turn idleness into industry, may in some instances have the effect of preventing the full expansion of genius. The great amount of acquirement rendered necessary by the higher class of examinations, as they are now conducted, not only in the universities, but in some other institutions, while it strengthens the power of learning, is by no means favorable to the higher faculty of reflection. But it must be borne in mind, that in this world none of our schemes are perfect, and that in all human affairs we must be content to do that which is best on the whole. Geniuses are rare exceptions to the general rule; and a mode of education, which might be well adapted to the few who think for themselves, would be ruinous to the unreflecting majority. As to making one system of education for one class of minds, and another for another, there are, if I may be allowed to use a metaphorical expression, mechanical difficulties in the way. Besides, who is to know what a boy's mind is, or what is his peculiar turn, until the greater part of his education is completed?

No doubt the system pursued at our universities, narrow as it still remains, is good training for the business of life; and we may point to worthies high in the state and in the law, who have borne away the brightest honors of the universities of which they are ornaments; we could also indicate brilliant examples in the same departments, who never shone till they appeared in their proper sphere. But how many senior wranglers and first-class men who went up like rockets have been as speedily extinguished, or pass unheeded in the by-ways of fame. Eubulus refers to Sir Walter Scott's observation, that "the best part of every man's education is that which he gave himself" — True, Thomas never spoke more truly — and Sir Humphrey Davy and John Hunter are brought forward as examples of men whose faculties might have been cramped and deranged, rather than improved by a more systematic education. It has been our privilege, and a great privilege it was, and still is, to have lived, and to be living, on intimate terms with some of the first philosophers, literary men, engineers, and artists of our time. The first among these have owed their high position to little or no extrinsic assistance.

Like Davy and John Hunter, what they were, they made themselves.

Crites, indeed, cannot altogether agree with Eubulus, though he does so to a great extent; but he comforts himself with the prospect of the changes as to education now in progress in this country, of which the principal result will be the introduction of new branches of study into our schools and colleges; so that those who have it not in their power to excel in one thing, will find that they may, nevertheless, excel in another.

The second dialogue ascends to the more ambitious inquiry into the nature of mind and matter, considers natural theology, and gives reasons for regarding the mental principle as distinct from organization. It is urged that the influence of the one on the other is not sufficiently regarded by metaphysicians.

When (says Crites) the materialist argues that we know nothing of mind except as being dependent on material organization, I turn his argument against himself, and say that the existence of my own mind is the only thing of which I have any actual and indubitable knowledge.

By far the most interesting portion of this dialogue is applied to the relations of the nervous system to the mental faculties; and here the practical knowledge and great experience of Ergates come into play. He gives several remarkable examples, and observes, that from them it seems to be a legitimate conclusion that the nervous system is instrumental in producing the phenomena of memory as well as those of sensation; and that memory resides not in every part of the nervous system, but in the brain. This faculty, he adds, is injured by a blow on the head, or a disease affecting the brain; but not by an injury of the spine, or a disease of the spinal chord.

The eyes may be amaurotic, but Milton and Huber retained the memory of objects which they had seen previous to their blindness. It is not the spinal chord, nor the nerves, nor the eye, nor the ear, but the brain, which is the storehouse of past sensations, by referring to which the mind is enabled to renew its acquaintance with events which are passed, and at the same time to obtain the means of anticipating, to a great extent, the events which are to come.

Here are one or two interesting examples of the disturbance of memory by a blow on the head, or a disease affecting the brain, the other functions remaining unimpaired: —

A groom in the service of the Prince Regent was cleaning one of some horses sent as a present to his Royal Highness by the Shah of Persia. It was a vicious animal, and he kicked the groom on the head. He did not fall, nor was he at all stunned or insensible; but he entirely forgot what he had been doing at the moment when

the blow was inflicted. There was an interval of time, as it were, blotted out of his recollection. Not being able to account for it, he supposed that he had been asleep, and said so to his fellow-servants, observing at the same time, that he must set to work to clean the horse, which he had neglected to clean in consequence of having fallen asleep.

Again : —

A young man was thrown from his horse in hunting ; he was stunned, but only for a few minutes ; then recovered, and rode home in company with his friends, twelve or thirteen miles, talking with them as usual. On the following day, he had forgotten not only the accident itself, but all that happened afterwards.

In this last case, the effect of the blow was not only to erase from the memory the events which immediately preceded the fall, but also to prevent the retention of the impression of those events which immediately followed the accident.

Then, as to the loss or impaired state of the faculty after fever or some other bodily ailment, we are presented with the following interesting cases : —

A gentleman found that he had lost the power of vision in one eye. Then he regained it partially in that eye, but lost it in the other. Afterwards he partially regained it in the eye last affected. He could now see objects when placed in certain positions, so that the image might fall on particular parts of the retina, while he was still unable to see them in other positions. These facts sufficiently prove the existence of some actual disease. But observe what happened besides : his memory was affected as well as his sense of sight. Although in looking at a book he recognized the letters of the alphabet, he forgot what they spelled, and was under the necessity of learning again to read. Nevertheless, he knew his family and friends ; and his judgment, when the facts were clear in his mind, was perfect.

The next example is equally striking, if not more remarkable : —

In another case, a gentleman who had two years previously suffered from a stroke of apoplexy (but recovered from it afterwards) was suddenly deprived of sensation on one side of his body. At the same time he lost the power, not only of expressing himself in intelligible language, but also that of comprehending what was said to him by others. He spoke what might be called *gibberish*, and it seemed to him that his friends spoke *gibberish* in return. But while his memory as to oral language was thus affected, as to written language it was not affected at all. If a letter was read to him, it conveyed no ideas to his mind ; but when he had it in his own hand, and read it himself, he understood it perfectly. After some time he recovered of this attack, as

he had done of that of apoplexy formerly. He had another similar attack afterwards.

With reference to the organ of speech, whatever that or its components may be, the case of a boy about five years old is referred to. The faculty of speech was, in this child, limited to the use of the word *papa* — a sound so simple that dolls are made by very simple mechanism to produce it distinctly. Ergates soon ascertained that the sense of hearing was perfect, and that there was no malformation of the soft palate, mouth, and lips. Inclination to speak was not wanting, but the attempt produced wholly inarticulate sounds. Yet there was no deficiency in the boy's powers of apprehension — nay, he seemed to be beyond the generality of children of the same age in this respect. He perfectly understood what was said to him by others, and answered by signs and gestures, and would spell with counters monosyllabic words which he could not utter. The external senses and locomotive powers were perfect, and all the animal functions properly performed. The only other manifestation of disease or imperfection of the nervous system was that, for two or three years before Ergates saw him, he had been subject to fits or nervous attacks, attended with convulsions, but which his provincial medical attendant regarded as having the character of hysteria rather than of epilepsy. Ergates was informed that eight years afterwards the boy could not speak, though he had made great progress otherwise ; and that among other acquisitions, he wrote beautifully, and was a very clever arithmetician.

The case of a girl is also recorded. When Ergates saw her, she was eleven years of age, with no faculty of speech, uttering merely some inarticulate sounds, which her parents in some degree understood, but which were wholly unintelligible to others. Here, again, the sense of hearing was perfect ; and there was no defect in the formation of the external organs. A careful examination satisfied the observer that the parents were correct in their statement that she comprehended all that was said to her. Perfectly tractable and obedient, she did not differ either in appearance or general behavior from other intelligent children. Little trouble had been taken with her education, for she was in humble life ; but when a book which she had never seen previously was placed before her, and she was desired to point out different letters, she did so readily and accurately, making no mistakes. Now, in this case, there had been no suffering from fits, no indications of cerebral disease, or other physical imperfection. As she was when Ergates saw her, the parents said she had been from the earliest age ; equally intelligent, but incapable of speech.

In this case there was probably some latent defect in the nervous system. We agree with Ergates in thinking that the best writers on the philosophy of the mind have erred in considering it too abstractedly ; not taking sufficiently into account the physical influences to which it is subjected. There are not wanting shrewd reasoners who consider that Schelling, Fichte, Cousin, and others of that school of mental science, have perverted psychology as completely, and perhaps more perniciously, than the Materialists. Descartes, Hartley, and that clever but somewhat fantastic Universalist, Dr. Hook, *did* take the physical influences into consideration. Doctors Reid and Berkeley, who, as Crites observes, were certainly anything but Materialists, considered them deeply. The inquiry of the first of the two last-named into the human mind, is founded on a searching examination of the senses ; and the germ of Dr. Berkeley's metaphysical investigations is contained in his essay on the corporeal function of vision.

An inquiry into the structure and condition of the sensorium in man and the lower animals thus becomes of great importance. We have seldom seen a more correct view of this most important part of the subject than that laid before the reader by Ergates, who sets out by safely assuming, as an established fact, that it is only through the instrumentality of the central parts of the nervous system that the mind maintains its communication with the external world. The eye, the ear, and all the other organs of sense, are necessary communicants ; but it cannot be denied, that the eye does not see, and that the ear does not hear ; for however perfect those organs may be, if the nerve which forms the communication between any one organ of sense and the brain be divided, the corresponding sense is destroyed. On the other hand, all the impulses by which the mind influences the phenomena of the external world, proceed from the brain. Divide the nerves which extend from the brain to the larynx, and the voice is gone ; sever the nerves of a limb, and it becomes paralytic, or, in other words, is withdrawn from the influence of the will. Cut through the spinal chord, and all sensibility and power of voluntary motion is lost below the divided part.

We shall now let Ergates speak for himself, because no form of words can be more lucid than his own :—

If we investigate the condition of the various orders of vertebrate animals, which alone admit of a comparison with our own species, we find, on the one hand, great differences among them, with regard to both their physical and mental faculties, and on the other hand a not less marked difference as to the structure of their brain. In

all of them the brain has a central organ, which is a continuation of the spinal chord, and to which anatomists give the the name of *medulla oblongata*. In connection with this, there are other bodies placed in pairs, of a small size and simple structure in the lowest species of fish, becoming gradually larger and more complex as we trace them through the other classes, until they reach their greatest degree of development in man himself. That each of these bodies has its peculiar functions, there cannot, I apprehend, be the smallest doubt ; and it is, indeed, sufficiently probable that each of them is not a single organ, but a congeries of organs, having distinct and separate uses.

Experiment and observation of changes produced by disease have thrown some light on this field of research, where so much darkness still requires to be enlightened ; and though we are among those who hold that cruelty, or the infliction of unnecessary pain on the animals subject to us, is not to be tolerated, but to be repressed, if need be, by the strong hand of the law, we cannot join in the condemnation of those experimental physiologists whose operations have, in some degree, rendered this mysterious subject less obscure :—

There is reason to believe that, whatever it may do besides, one office of the *cerebellum* is to combine the action of the voluntary muscles for the purpose of locomotion. The *corpora quadrigemina* are four tubercles, which connect the *cerebrum*, *cerebellum*, and *medulla oblongata* to each other. If one of the uppermost of these bodies be removed, blindness of the eye of the opposite side is the consequence. If the upper part of the *cerebrum* be removed, the animal becomes blind and apparently stupefied ; but not so much so but that he may be roused, and that he can then walk with steadiness and precision. The most important part of the whole brain seems to be a particular portion of the central organ *medulla oblongata*. While this remains entire, the animal retains its sensibility, breathes, and performs instinctive motions. But if this small mass of the nervous system be injured, there is an end of these several functions, and death immediately ensues. These facts, and some others of the same kind, for a knowledge of which we are indebted to modern physiologists, and more especially to M. Magendie and M. Flourens, are satisfactory as far as they go, and warrant the conclusion that there are various other organs in the brain, designed for other purposes, and that if we cannot point out their locality, it is not because such organs do not exist, but because our means of research into so intricate a matter are very limited.

Now if the speculation as to the existence of special organs in the brain, for the purpose of locomotion and speech, be correct, it would appear probable that there is a special organ for that of memory also. Ergates acknowledges the truth of this observation, which is

given to Crites, but honestly adds that there our knowledge ends:—

We may, I suppose (says Ergates), take it for granted that there is no animal whose memory is equally capacious with that of man; and we know that, with the exception perhaps of the dolphin (of whose faculties we know nothing), there is no other animal in whom that portion of the cerebrum which we call hemispheres, and which are bounded externally by the convolutions, is equally developed. It may be said, and not without some show of reason, "Do not these facts seem to indicate where the faculty of memory resides?" Willis answered the question in the affirmative.\* But observe how it is in birds. In them there are no convolutions; and the only part of the brain which can be said to correspond to the cerebral hemispheres of man, is merely a thin layer of cerebral substance expanded over some other structures, which are developed to an enormous size. Yet we know that birds which are domesticated exhibit signs of considerable memory, parrots and cockatoos recognizing individuals after a long interval of time; and that birds in their natural state return to their old haunts after their annual migrations. The exploits of the carrier-pigeons cannot be explained without attributing to them no small powers of observation and of recollecting what they had observed. Perhaps future observations on the effects produced by disease of the brain in connection with affections of the memory may throw some light on this mysterious subject. At present we must be content to acknowledge that we know nothing as to the locality of the function, nor of the minute changes of organization which are connected with it.

In the third dialogue the subject of memory is continued, and we easily pass to the consideration of the sequence and association of ideas, and to the suggestion of them by internal physical causes, acting on the brain by the nerves, or through the medium of the blood. And here we enter the land of dreams, and are interested by anecdotes illustrating the power of local disease or injury, in producing the phantasms which distress us, when we are subject to the dominion of Queen Mab. Accidental pressure on a tumor in the leg gave rise to a frightful dream; and children, who are often prevented from falling asleep, by the local pains which accompany disease of the hip-joint, and painful startings of the limb, are tormented when worn with watching they at last fall asleep, by distressing dreams. A gentleman dreamed that a great dog was tearing him, awoke in terror, and found that his left arm was in a state of complete numbness, from which it afterwards recovered. Ergates well accounts for such phenomena, by stating that an impression is made on a nerve, producing in its minute structure certain changes, which

affect the mind itself. But, as he truly observes, the same effect may be produced without the intervention of the nerves, by the substitution of dark-colored venous blood for that scarlet or arterial blood whose influence Bichat has shown to be so necessary for the due performance of the functions of the brain. Blood of improper quality, or containing something which blood should not contain, may not only disturb the cerebral functions, but even influence the mind. Hence the soothing and luxurious apocalypse of the habitual opium-eater, and the mad energy of the Lascar, who runs a muck at all he meets, under the influence of haschisch. In like manner the poison of small-pox, fermenting and accumulating, brings on severe fever, with not unfrequently its train of delirious phantasms. A young gentleman, coming from the country, under the influence of this contagion, fancied that he was beset by a swarm of bees, knocked at the door of the chamber of a friend, in a half-dressed state, and when admitted walked to the sofa, and, after complaining of the annoying swarm, which existed only in his imagination, lay down on it, as he was, and, evidently supposing that he was in bed, said, 'Doctor,' — the mode of address which he generally used towards his friend, who had known him from childhood, but who was, however, no M. D., — 'tuck me up.' On his way down the youth was under the delusion that the coachman by whose side he sat, was his servant, whom he had left behind, described to coachee's great annoyance, the places which they passed, and among other pieces of information pointed out to him the Peacock at Islington, where he had changed horses for some twenty years, as something new.

The uncomfortable thoughts and fretful peevishness which make the gouty man a trouble to himself and to every one about him, have been traced by Dr. Garrod, to the superabundance of lithic acid in the blood. How much of moral and physical evil do we bring upon ourselves, by our lazy and luxurious habits:—

Happiness, after all, is not so unequally distributed in this world as to a superficial observer it seems to be. Poverty is terrible if it be such as to prevent the actual necessities of life. But the agricultural laborer who has enough of wholesome food and warm clothing for himself and his family, and who has the advantage, which cannot be too highly estimated, of living in the open air, has more actual enjoyment of life than the inheritor of wealth, living in a splendid mansion, who has too much of lithic acid in his blood.

We commend the following to the notice of those who think that schools (where, by the way, we seldom find the poorer classes taught those arts which would enable them to be good

\* *De Anatomie Cerebri*, cap. 10.

servants and useful members of society,) are the sovereign remedy for all social ills. Hear Ergates again:—

Much is said at present as to the necessity of extending education, as the means of improving the condition of the multitude. I am not so great a heretic as to deny the advantages of knowledge and of early instruction, especially if it be combined with a proper training of the mind, so as to give the pupil habits of self restraint. But there is much to be desired besides. Nothing can tend more to every kind of moral and intellectual degradation that the vice of gin-drinking, so prevalent in some, but not in all, of the lower classes of society. In a conversation which I had with a very intelligent person employed by the "City Missionary Society," whose location was in London among the inhabitants of St. Giles's parish, he said, "I assure you that there is scarcely any one of them who might not obtain a comfortable livelihood if he could leave off drinking gin." But see how one thing hangs upon another, and how one evil leads to another evil. Mr. Chadwick has shown that many are driven to drinking gin as affording a temporary relief to the feelings of depression and exhaustion produced by living in a noxious atmosphere; and he gives instances of individuals who had spontaneously abandoned the habit, when they were enabled to reside in a less crowded and more healthy locality, where they could breathe the pure air, instead of noxious exhalations.—The case of such persons is analogous to that of others, who become addicted to the use of opium, as the means of relief from bodily pain. Schools and churches are excellent things, but it is a vast mistake to suppose that they will do all that is required. There can be no feeling of contentment where there is an insufficient supply of wholesome food, and the "Temperance Society" can make few converts among those who live in crowded buildings, unventilated, and with imperfect drainage. Our late legislation has accomplished much, and as much as it can reasonably be expected to accomplish, towards the attainment of the first of these objects; and measures are now in progress which justify the expectation that eventually much good may be done in the other direction also.

May a blessing attend the efforts of those benevolent men who, through good report and evil report, have persisted in this labor of love. None but those whose offices bring them in contact with the dwellings of the London poor can form any notion of the squalid wretchedness in which they exist, frequently within bow-shot of gilded palaces. No wonder the wretched inmates there huddled together have recourse to alcohol—that curse to which we owe nine-tenths of the crime which fills our jails. On some of these criminals the fire-water seems to act so as to cauterize every good and to inflame every bad propensity. Burke and Hare prepared themselves for their task by copious libations of gin. In others, it

almost entirely—in some cases, entirely—obliterates the memory of what passed when they were under the intoxicating influence. The forgetfulness seems as complete as if they had drunk of Lethe; and we have seen numbers who had committed the most brutal assaults under the excitement of ardent spirits, who, when called on for their defence, have said, and as we believe truly, that they had no recollection at all about the matter.

The subject of false perceptions simulating realities is well handled, and the phantoms seen by Nicolai and others discussed. The case of a gentleman, eighty years of age, who had been for some time laboring under hypochondriasis, attended with other indications of cerebral disease, is mentioned:—

On a cold day in winter, while at church, he had a fit, which was considered to be apoplectic. He was taken home and bled, and recovered his consciousness, not being paralytic afterwards.—He died, however, in a few days after the attack. During this interval, though having the perfect use of his mental faculties, he was haunted by the appearance of men and women, sometimes in one dress, sometimes in another, coming into and loitering in the room. These figures were so distinct that, at first, he always mistook them for realities, and wondered that his family should have allowed such persons to intrude themselves upon him. But he soon by a process of reasoning corrected this error, and then talked of them as he would have talked of the illusions of another person.

Such spectral illusions, some of them ghastly enough, are not uncommon; and those who feel interested in this part of the subject will find an ample phantasmagoria in the works of Alderson, Ferriar, Hibbert, Scott, Esquirol, Brewster, and others. In many of these cases the patient, like the gentleman whose mental state is noticed in the volume before us, is sensible that the spectra are illusions, and in almost all who recover, the spectra become gradually more and more faint till they vanish altogether. We know a gentleman of strong mind, and a most accomplished scholar, who was for many years subject to such phantasms, some sufficiently grotesque, and he would occasionally laugh heartily at their antics. Sometimes it appeared as if they interrupted a conversation in which he was engaged; and then, if with his family or intimate friends, he would turn to empty space, and say, "I don't care a farthing for ye, ye amuse me greatly sometimes, but you are a bore just now." His spectra, when so addressed, would to his eye resume their antics, at which he would laugh, turn to his friend, and continue his conversation. In other respects, he was perfectly healthy, his mind was of more than ordinary strength, and he would speak

of "his phantoms," and reason upon their appearance, being perfectly conscious that the whole was illusive.

Many a ghost, we suspect, is raised by indigestion or disturbance of the nervous system, arising from a vitiated state of the blood, produced by stimulants, disease, or narcotics. There are few who are not familiar with the visions of the "Opium-eater."

"Mr. Coleridge," said a lady to the author of *Christabel*, one day, "do you believe in ghosts?"

"No, madam, I have seen too many of them," was the reply.

Swedenborg was an exception to the general rule that persons haunted by similar spectral or auditorial illusions do not mistake the deceptions for real objects. He was in his fifty-eighth year when, says he, "I was called to a holy office by the Lord, who most graciously manifested himself in person to me his servant, in the year 1745, and opened my sight into the spiritual world, endowing me with the gift of conversing with spirits and angels." This event, according to his own account, happened at an inn in London, in April of that year, but not on the first day of the month. He appears to have been sincere in his belief that he conversed with Moses and Elias, was never seen to laugh, but his countenance always wore a cheerful smile. He was a man of no ordinary talents and attainments, upright and just as a public functionary; and so far from being an eccentric person in society, he was easy in his manners, accommodating himself to his company, conversing on the topics of the day, and never alluding to his peculiar and extraordinary principles unless he was questioned, when he would answer freely, just as he had written of them. Any disposition to impertinence or banter was met with a manner and answer that silenced the querist without satisfying him.

By an easy step we are now led to the awful consideration of mental derangement, and the question, so vitally interesting in a social point of view, of "moral insanity," as it is called.

We entirely agree with Crites in the certainty that it is dangerous to admit the plea of irresponsibility for those who labor under this affection, to the extent to which Dr. Pritchard and others have claimed it for them; and we would earnestly entreat those who are concerned in the administration of justice—juries especially—to consider the remarks which follow:—

Observe (says Crites), that I use the term Moral Insanity not as comprehending cases in which there is a belief in things that do not exist in reality, or cases of idiocy, or those approaching to

idiocy; but limiting it strictly and exclusively to the definition given by writers on the subject.

The law makes a reasonable allowance for the subsiding of passion suddenly provoked. But we are not, therefore, to presume that the same allowance is to be made for those in whom a propensity to set fire to their neighbors' houses, or commit murder, is continued for months, or weeks, or even for hours. Is it true that such persons are really so regardless of the ill consequences which may arise, so incapable of the fear of punishment, and so absolutely without the power of self-restraint, as they have been sometimes represented to be? If not, there is an end of their want of responsibility. Let me refer here to the instance of the gouty patient. . .

Under the influence of his disease, every impression made on his nervous system is attended with uneasy sensations. If such a person has exerted himself to acquire the habit of self-control, the evil ends with himself; but otherwise he is fractious and peevish; flies into a passion, without any adequate cause, with those around him, and uses harsh words which the occasion does not justify; conduct of which he can offer to himself no explanation, except that he cannot help it; and for which, if he be a right-minded person, he is sorry afterwards. If he were to yield to the impulse of his temper so far as to inflict on another a severe bodily injury, ought it to be admitted as an excuse that Dr. Garrod had examined his blood, and found in it too large a proportion of lithic acid?

If there be any one—except always the school of Moral Insanitists—so perverted as to answer in the affirmative, we beg him to read a little further:—

Yet, when Oxford yielded to what was probably a less violent impulse, which caused him to endeavor to take away the life of the Queen, the jury acquitted him, on the ground of his being the subject of "Moral Insanity." It seems to me that juries have not unfrequently been misled by the refinements of medical witnesses, who, having adopted the theory of a purely moral insanity, have applied that term to cases to which the term insanity ought not to be applied at all.

Some of our readers may remember the case of Captain Johnson, which made no little noise at the time.

This man on his arrival in England, charged his crew with mutiny on the high seas, but, on the hearing by the magistrate at the Thames Police Court, the tables were turned, and he was charged with the murder of more than one of his crew, and with wounding others of them with intent to murder. It appeared that, on the voyage, he had fallen in with a French ship, from which he had obtained a supply of wine and brandy, that he drank to excess, and committed the crimes with which he was charged, at intervals. No person could appear to be more sane than he was when at

the bar of the police court ; but he had uttered some doggrel about the battle of Bannockburn while he was hacking and hewing the mate and the crew, and the jury found him not guilty on the ground of insanity. He cut the mate almost to pieces—one of the witnesses said that the captain “cut a piece off him every half hour”—killed the wretched man by inches, and the jury pronounced him to be a madman. Mad drunk he probably was when he committed the savage cruelties laid to his charge ; but, if every man who excites a naturally brutal temperament by stimulants is to be considered an irresponsible agent, who is safe ?

Every one may be said to be beside himself when he commits a crime. But laws are made for the very purpose of checking such impulses.

The Esher murders still reek in the recollection of all. Anne Brough's case may be shortly stated as that of a wickedly vicious woman, who, having been found out and upbraided by her injured husband, cut the throats of her six children to feed her revenge. The jury found her not guilty on the ground of insanity.

It is hardly too much to say that neither the murderer nor the murderer were so insane as the two dozen of wrongheads who acquitted them on account of the accumulated enormities which they had committed. It is as if these juries had said to evil-minded persons, “Don't murder one only, or you will stand a chance of being hanged ; murder many—the more cruelly the safer—and you are sure to get off, and be kept at the expense of a benevolent government for life.”

Even in cases of actual insanity, it has always struck us as a most mischievous absurdity that, in criminal cases, this question should be left to the determination of a common jury. Twelve men, respectable in their station, but whose minds have seldom been applied to anything beyond the ordinary business of life, are called upon to inquire into the most mysterious part of our organization, and to decide, off-hand, a question which is difficult to those who have studied the subject most deeply.

But hear Crites in continuation :—

It is true that the difference in the character of individuals may frequently be traced to difference in their organizations, and to different conditions as to bodily health ; and that, therefore, one person has more, and another has less difficulty in controlling his temper and regulating his conduct. But we have all our duties to perform, and one of the most important of these is, that we should strive against whatever evil tendency there may be in us arising out of our physical constitution. Even if we admit (which I do not admit in reality), that the impulse which led Oxford to the commission of his crime was

at the time irresistible, still the question remains whether, when the notion of it first haunted him, he might not have kept it under his control, and thus prevented himself from passing into that state of mind which was beyond his control afterwards. If I have been rightly informed, Oxford was himself of this opinion ; as he said, when another attempt had been made to take away the life of the Queen, “that if he himself had been hanged, this would not have happened.” We have been told of a very eminent person who had acquired the habit of touching every post that he met with in his walks, so that at last it seemed to be a part of his nature to do so ; and that if he found that he had inadvertently passed by a post without touching it, he would actually retrace his steps for the purpose. I knew a gentleman who was accustomed to mutter certain words to himself (and they were always the same words), even in the midst of company. He died at the age of ninety, and I believe that he had muttered these words for fifty or sixty years.—These were foolish habits ; but they might have been mischievous. To correct them at last would have been a very arduous undertaking. But might not this have been easily done in the beginning ? And if so—if, instead of touching posts, or muttering unmeaning words, these individuals had been addicted to stealing or stabbing—ought they to have been absolved from all responsibility ? It has been observed by a physician who has had large opportunities of experience on these matters, that “a man may allow his imagination to dwell on an idea until it acquires an unhealthy ascendancy over his intellect.”\* And surely, if, under such circumstances, he were to commit a murder, he ought to be held as a murderer, and would have no more claim to be excused than a man who has voluntarily associated with thieves and murderers until he had lost all sense of right and wrong ; and much less than one who has had the misfortune of being born and bred among such malefactors.

Those who are addicted to the morbid sympathy which is so indulgent to criminals, and especially to that class who have committed crime, but to use the language of their apologists, “couldn't help it,” will do well to study Dr. Mayo's Croomian Lectures on Medical Testimony and Evidence in Cases of Lunacy, wherein the whole subject is treated with lucid ability, and a just theory is supported by practical knowledge, the result of great and well-applied experience.

The fourth dialogue treats of the different functions of the brain and spinal chord, and the continuance of life in some animals without the brain, as in the case of the headless lizards of Le Gallois, and of the tortoise whose brain had been entirely removed from the skull by Rödi, if such automatic existence may be dignified by the name of life, which may, indeed, be present without anything bearing

\* “Anatomy of Suicide,” by Forbes Winslow, M.D.

the most remote relation to the mental principle—as in the living organized “extraordinary product of human generation,” in which was neither brain, spinal marrow, nerves, heart, nor lungs, recorded by Dr. John Clarke.\* The whole of this chapter is most interesting, full of information and well-expressed thought.

The origin of the nervous force and the narcotic effects of venous or dark-colored blood on the brain, as depriving it of that something which exists in the scarlet blood but not in the venous blood, and which is necessary to the generation of the nervous force, are forcibly laid before the reader. Alcohol, chloroform, opium, and the woora poison, when introduced into the circulation produce the same effect, even though the supply of the scarlet blood is not interrupted; but Ergates himself confesses, that of the modus operandi of such terrible agents we are wholly ignorant:—

All that we know is the simple fact, that when their operation is complete, they render the brain insensible to the impressions made on the external senses, and incapable of transmitting the influence of volition to the muscles. Pressure on the brain or a stroke of lightning may produce the same effect.

Ergates purposely avoids the use of the word “unconsciousness,” for as to that, he truly says, we know nothing:—

The mind may be in operation, although the suspension of the sensibility of the nervous system, and of the volition of the muscles, destroys its connection with the external world, and prevents all communication with the minds of others.

But who shall say when the external senses are completely and absolutely closed?

An elderly lady had a stroke of apoplexy: she lay motionless, and in what is called a state of stupor, and no one doubted that she was dying. But after the lapse of three or four days, there were signs of amendment, and she ultimately recovered. After her recovery, she explained that she did not believe that she had been unconscious, or even insensible, during any part of the attack. She knew her situation and heard much of what was said by those around her. Especially she recollects observations intimating that she would very soon be no more, but that at the same time she had felt satisfied that she would recover; that she had no power of expressing what she felt, but that nevertheless her feelings, instead of being painful, or in any way distressing, had been agreeable rather than otherwise.—She described them as very peculiar; as if she were constantly mounting upwards, and as something very different from what she had ever before experienced. Another lady, who had met

with a severe injury of the head, which caused her to be for some days in a state of insensibility, described herself as having been in the enjoyment of some beatific visions, at the same time that she had no knowledge of what had actually happened, or of what was passing around her.

Such was the euthanasia of Queen Katherine, as described by him who was not of an age, but for all time:—

Saw you not even now a blessed troope  
Invite me to a banquet, whose bright faces  
Cast a thousand beams upon me like the sun?  
They promised me eternall happinesse,  
And brought me garlands (*Griffith*) which I  
feele  
I am not worthy yet to weare: I shall assur-  
edly.

\* \* \* \* \*

Do you note

How much her Grace is altered on the soda-  
ine?  
How long her face is drawne? how pale she  
lookes,  
And of an earthly cold' Marke her eyēs?  
*Griffith*. She is going, wench. Pray, pray!\*

Intelligent observers, “who do attend the dying,” are satisfied that even where an ordinary bystander would conclude that the moribund individual is in a state of complete stupor, the mind is often active, ay, even at the very moment of death; and the remarkable case of Dr. Wallaston is alluded to. The decease of that eminent man was occasioned by a tumor of the brain, about the size of half a hen's egg, which, by encroaching on the ventricles, caused an effusion of fluid into them, and produced paralysis of one side of the body. There was ample evidence that the mental faculties were perfect during his last illness, and even in his last moments:—

Some time before his life was finally extinguished, he was seen pale, as if there was scarcely any circulation of blood going on, motionless, and to all appearance in a state of complete insensibility. Being in this condition, his friends who were watching around him observed some motions of the hand which was not affected by paralysis. After some time, it occurred to them that he wished to have a pencil and paper; and these having been supplied, he contrived to write some figures in arithmetical progression, which, however imperfectly scrawled, were yet sufficiently legible. It was supposed that he had overheard some remarks respecting the state in which he was, and that his object was to show that he preserved his sensibility and consciousness. Something like this occurred some hours afterwards, and immediately before he died, but

the scrawl of these last moments could not be deciphered.

Indeed this accomplished philosopher and acute and accurate observer appears to have been employed in making observations on his own case, even *in extremis*. Before the occurrence of the acts above related, but when he was lying speechless and motionless, his mouth was moistened with a morsel of pine-apple. He made some sign which induced his friends to furnish a pencil and paper, and he wrote the words "pine," "good," as if to show that the nerves of taste still did their duty.

One of the effects produced by the sudden and apparently close approximation of death is illustrated by the well-known case of the amiable and efficient Admiralty Hydrographer, Sir Francis Beaufort, when he was preserved from being drowned, and when—

Every incident of his former life seemed to glance across his recollection in a retrograde succession, not in mere outline, but the picture being filled with every minute and collateral feature, forming a kind of panoramic view of his entire existence, each act of it accompanied by a sense of right and wrong.\*

A similar effect was produced on an officer in the Company's service, when caught on board a Burmese canoe in the late terrible hurricane, which caused such extensive destruction. The frail bark had been lightened by throwing the whole of his property overboard; hope was gone; the frantic, despairing Burmese crew were calling on their gods, and death stared them in the face. The officer declares, that, though in those awful moments he entirely retained his self-possession, every act of his life came before him with the most vivid intensity. He and the crew were miraculously saved, when larger vessels near them were swallowed up.

When about eight years old, the writer of this imperfect notice had a narrow escape from drowning. Some big boys of the school where he was, threw him, before he had learned to swim, into water far beyond his depth, and he sank. After the first confusion occasioned by the fright and "hideous noise of waters in his ears," every passage of his young life glanced before him. Then his sensations became far from unpleasant, and his last remembrance was a fancy that he was lying in the lap of his mother, in a lovely meadow, enamelled with cowslips, blue-bells, violets, and other bright spring flowers.

All the remarks upon the state of mind preceding death are most interesting; and we are presented with the consoling and, as we be-

lieve, true observation, that the mere act of dying is seldom, in any sense of the word, a painful process; and that, with regard to the actual fear of death, it seems that the Author of our existence, for the most part, gives it to us when it is intended that we should live, and takes it away from us when it is intended that we should die. Claudio's eloquent horror of a violent death is natural enough, especially in a mind capable of consenting to purchase life upon such terms as he proposes to his sister; but Ergates, whose experience must have been great, declares that he never knew but two instances in which, in the act of dying, there were manifest indications of the fear of death, and those were cases of haemorrhage, in which the depressing effects arising from the gradual loss of blood seemed to influence the minds of the sufferers. "Seneca might have chosen," adds Ergates, "an easier death than that from opening his arteries."

Death from mere old age is compared to falling asleep, never to awaken again in this world; and hence the transition is easy to a lucid consideration of the phenomena of sleep, "nature's soft nurse," so necessary to our existence. Death or madness must be the result of a long continued absence of this great restorer: so felt and said, in his last illness, the noble poet who had done so much for fame at so early a period of his life, and whose untimely death too truly verified one part of his assertion.† Ergates mentions the case of a gentleman who, from intense anxiety, passed six entire days without sleep. At the end of this time he became affected with illusions of such a nature that it was necessary to place him in confinement. After some time he recovered perfectly. He had never shown any signs of mental derangement before, nor had any one of his family, and he has never been similarly affected since. Those who have been subjected to cruel tortures have declared that the most intolerable was the deprivation of sleep; and as this was one of the modes of treating the unhappy old women who fell into the hands of the witch-finders, it may account for some of their illusions, and the crazy confessions that they made. The sick-nurse has frequently recourse to stimulants, which indeed remove for a time the uneasiness and languor occasioned by the want of sleep. But the temporary relief is dearly purchased, and those who have recourse to alcohol on such occasions, should know that it does not create nervous power, but only enables the recipients to use up that which is left, leaving them in more need of rest than ever, when the stimulus has ceased to act.

There are not wanting those who look upon Dream-land as sacred ground; and we could

\* Autobiographical Memoir of Sir John Barrow, Bart.

† Moore's Life of Lord Byron.

say much upon the warnings which such believers recount in proof of their faith. But though every dream that "comes true" is carefully recorded, the failures are not so faithfully registered. We are too apt to keep a list of the prizes in the dream-lottery, and to forget the blanks. But whether dreams descend from Jove and are prophetic, or the mere vagaries of the uncontrolled imagination, the rapidity of the incidents which arise, and the multitude of scenes in the visionary drama which appear to pass in a given time, cannot be denied. They "come like shadows—so depart." An anecdote related of himself by the late Lord Holland is alluded to. He declared that, on one occasion, being much fatigued, he fell asleep while a friend was reading aloud, and had a dream, the particulars of which would have occupied him a quarter of an hour or longer to express in writing. Yet, when he awoke, he found that he remembered the beginning of one sentence, while he actually heard the latter part of the sentence immediately following it, so that he could have slept only for a few seconds. This reminds one of Mohammed, who, on his return from a journey through space with the angel Gabriel, found the water still running from the pitcher which he had overset with his foot as he was setting out. That memory is a principal source whence the incidents of dreams are drawn there can be no doubt. The older we grow, the more we live, in our dreams, with departed spirits. As we advance in life, time, too, passes more rapidly. Poor, dear Theodore Hook, in his last years, would sadly say, when spring returned,—"Here are the leaves again!" The effect of external agencies and internal bodily affections on our dreams is generally admitted; but we agree with Ergates when he doubts Lord Brougham's axiom that we never dream except while in a state of transition from being asleep to being awake. We cannot, however, concur with Crites when he doubts whether Coleridge composed "Kubla Khan" in his sleep. No person could appear to be more certain of anything than was the poet that such was the case, and we are of those who deeply regret the interruption that disturbed his remembrance, and deprived us of the rest of that most melodious verse.

The fifth dialogue treats in a masterly manner of the mental faculties of animals, and of the relation of those faculties to the structure of the brain. In this inquiry the cerebral organs connected with the animal appetites and instincts are passed in review. The importance of the posterior lobes of the cerebrum, which are almost peculiar to the human race, cannot be doubted.

The only other animals in which they exist

are those of the tribe of monkeys, and in them they are of a much smaller size than they are in man. The absence of the posterior lobes includes the absence of what seems to be a special organ situated in the lower part of the posterior elongation of the lateral ventricle, known by anatomists under the name of the *hippocampus minor*. The *corpus callosum* is the name given to a broad thick band of nervous fibres which unites the cerebral hemispheres, as if for the purpose chiefly of bringing them into harmonious action with each other. In the kangaroo, which I have already mentioned as having a very low degree of intelligence, the *corpus callosum* is altogether wanting. This fact in itself might lead us to conjecture that some important office is allotted to it; and the opinion is confirmed by observations made on the human subject. Cases are on record in which this organ was wanting, either wholly or in part. In none of them could it be said that the intellectual faculties were altogether deficient. But in all of them there was an incapability of learning, producing an apparent dullness of the intellect, so that the individuals were unfit for all but the most simple duties of life.\*

You may make almost anything of a man with a well-developed brain; not so with a monkey, elephant, dog, or seal; though you may do a good deal with them. In the brutes there is a certain limit beyond which you cannot go.

The intelligence and instinct of insects is admirably illustrated: for example—

Their habit—(Ergates is speaking of bees)—to build their honeycomb from above downwards, attaching it to the upper part of the hive. On one occasion, when a large portion of the honeycomb had been broken off, they pursued another course. The fragment had somehow become fixed in the middle of the hive, and the bees immediately began to erect a new structure of comb on the floor, so placed as to form a pillar supporting the fragment, and preventing its further descent. They then filled up the space above, joining the comb which had become detached to that from which it had been separated, and they concluded their labors by removing the newly-constructed comb below; thus proving that they had intended it to answer a merely temporary purpose.

No human architect could have proceeded more rationally.

The sixth and last dialogue, which deals with the science of human nature, crowns the interesting series; and, in it, the pretensions of Phrenology, with its theories of proud rats who live in hay-lofts, humble rats who live in gutters and sewers, the thirty-three faculties, and all the rest of it, come under searching

\* See Mr. Paget's and Mr. Henry's observations in the "Medico-Chirurgical Transactions," vols. xxix. and xxxi.

description. When phrenologists refer the mere animal propensities in man chiefly to the *posterior lobes*, they forget that they are absolutely wanting in quadrupeds. Again, the brain of birds is essentially different in structure not only from the brain of man, but from that of all other mammalia. It has no convolutions, and can present no phrenological organs, as they are termed, corresponding to those which are said to exist in the human brain. Yet few animals are more pugnacious than a fighting cock, or more destructive than an eagle; and all will allow that no creatures are more attached to their homes and young than birds, to say nothing of their musical and imitative powers.

Though a large development of the cerebral organs in man will generally be found to be accompanied by large powers of mind, the size of the head is a very unsafe criterion. The powerful and energetic Daniel Webster had apparently brains enough to fill two hats. The mighty Newton's head seems, from the memoranda left to us, to have been below the average size; and Byron's head was small. The experience of Ergates, that some very stupid persons, within his own knowledge, have had very large heads, corresponds with our own. But space forbids our further pursuit of this most interesting topic. We must break off, and leave the consideration of what may be the capabilities of the mental principle, independently of organization, or how much belongs to the one and how much to the other, confessing with Ergates, that in this, as in other matters belonging to this order of inquiries, our actual knowledge goes a very little way:—

"We see these things through a glass darkly," and must be content humbly to acknowledge that the greater part is not only beyond the limits of our observation, but probably beyond those of our comprehension.

We trust, however, that the gifted author will continue the "Psychological Inquiries;" and, in that hope, close this most instructive and amusing book. He must be very accomplished and very good, who does not rise from the perusal of it a wiser and a better man.

From The Spectator.

#### BELL'S EDITION OF WYATT'S POEMS.\*

THE true claim of Wyatt to his poetical reputation seems to rest on the fact that he was the first modern-English poet; for although he and Surrey were contemporaries, Wyatt was the older man, and according to all probability the older writer. It is true that his poetry is not of a high

\* Poetical Works of Sir Thomas Wyatt, Edited by Robert Bell. [The Annotated Edition of the British Poets.] Published by Parker and Son.

order, if it be deemed poetry all. Many of his love poems were direct translations from Petrarch or other sonneteers; those subjects which he derived more immediately from his own fancy were similar in theme and in treatment to the Italian poetasters. His Penitential Psalms are paraphrases, of course. His satires and some occasional short pieces have more originality of subject—are the the result of reflection on life, or are drawn more directly from life. Wyatt cannot, however, be said to have originated a new class, or a new style.

Neither is there vigor or ease in his style itself, much less poetical spirit. He has few smooth or happy lines; and although a good deal is to be allowed for the ruggedness of the age in respect to versification, that does not apply to the absence of poetical thought or of weighty lines. But in fact his verse is less lame, when pronounced according to the fashion of his age, than prosaic. It is indeed singular how a man with so little of the imagination and spirit of a poet should have done so much for the formal part of poetry. A more advanced state of civilization than that of England under the Tudors suggested his subjects; but, a little allowance being made for fashionable conceits and single words, his poems might be read with pleasure now, as regards language and treatment. As far as diction is concerned, this is quite as modern as some of the Elizabethan revivals.

#### THE LOVER COMPLAINETH HIS ESTATE.

I see that chance has chosen me  
Thus secretly to live in pain,  
And to another given the fee,  
Of all my loss to have the gain;  
By chance assigned thus do I serve,  
And other have that I deserve.

Unto myself sometime, alone,  
I do lament my woful case;  
But what availeth me to moan,  
Sinee truth and pity hath no place  
In them to whom I sue and serve,  
And other have that I deserve.

To seek by mean to change this mind,  
Alas! I prove it will not be;  
For in my heart I cannot find  
Once to refrain, but still agree,  
As bound by force, alway to serve,  
And other have that I deserve.

Such is the fortune that I have,  
To love them most that love me least;  
And to my pain to seek, and crave  
The thing that other have possessed;  
So thus in vain alway I serve,  
And other have that I deserve.

And till I may appease the heat,  
If that my hap will hap so well,  
To wail my wo my heart shall fret,  
Whose pensive pain my tongue can tell;  
Yet thus unhappy must I serve,  
And other have that I deserve.

The want of aptness and comprehensiveness of thought is the more remarkable, as Wyatt's diplomatic despatches exhibit a nice observation, and soundly judicious conclusions. His great enemy Bonner, allowed his wit—"witty he is, and pleasant among company, contented to make and keep cheer." Wyatt's defence before the Privy Council against a charge of treason that

Bonner had concocted exhibits not only wit and satire, but greater powers of description than he displays in his versified pictures of court life. Bonner and another had been sent out assistant envoys to Wyatt. The charge of treason rested on a correspondence with Cardinal Pole; but there was much evidence of a cumulative nature, some relating to Wyatt's speeches about the King and the public business, some to his neglect and ill-treatment of his colleagues, or his own lax living. The following reply explains the nature of the charge.

First I report me to my servants, whereof some of them are gentlemen, right honest men; to their own servants; yea, and let them answer themselves. Did ye not always sit at the upper end of the table? Went ye abroad at any time together but that either the one or the other was on my right hand? Came any man to visit me whom I made not do ye reverence, and visit ye too? Had ye not in the galley the best and most commodious places? Had any man a worse than I? Where ye were charged with a groat, was not I charged with five? Was not I for all this first in the commission? Was not I ambassador-resident? A better man than either of you both should have gone without that honor that I did you, if he had looked for it. I know no man that did ye dishonor, but your unmannly behavior, that made ye a laughingstock to all men that came in your company, and me sometime sweat for shame to see you. Yet let others judge how I hid and covered your faults. But I have not to do to charge you; I will not spend the time about it.

Another occasion there is that I should say, "They were more meet to be parish priests than ambassadors." By my truth I never liked them, indeed, for ambassadors; and no more did the most of them that saw them, and namely they that had to do with them.

Bonner had charged the ambassador-resident with visiting certain nuns at Barcelona for improper purposes. Wyatt thus defends himself, and retorts upon his episcopal accuser.

To the end ye be fully persuaded and informed of the matter, there be many nuns in the town, and most of [them] gentlewomen, which walk upon their horses; and [many] here and there talk with these ladies, and when they will, go and sit company together with them, talking in their chambers. Gentlemen of the Emperor's chamber, earls, lords, dukes, use the same, and I among them. I used not the pastime in company of ruffians, but with such; or with the ambassadors of Ferrara, of Mantua, of Venice, a man of forty years old, and such vicious company.

\* \* \* \* \*

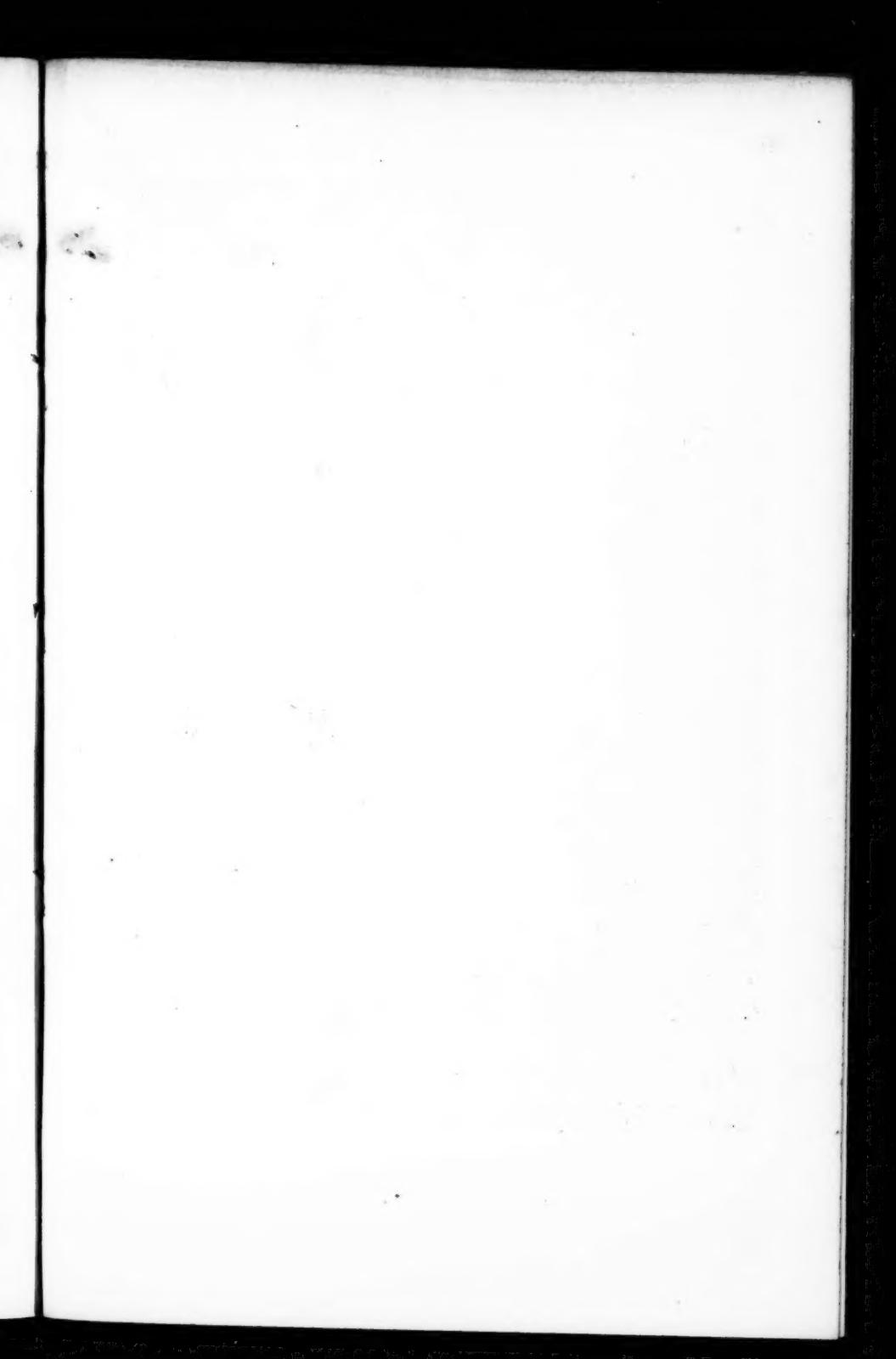
Come on now, my Lord of London, what is my abominable and vicious living? Do ye know it? or have ye heard it? I grant I do no profane chastity; but yet I use not abomination. If ye know it, tell it here; with whom? and when? If ye heard it, who is your author? Have ye seen me have any harlot in my house whilst ye were in my company? Did ye ever see woman so much as dine or sup at my table? None, but for your pleasure the woman that was in the galley; which I assure you may be well seen; for, before you came, neither she nor any other came above the mast. But because the gentlemen took pleasure to see you entertain her, therefore they made her to dine and sup with you; and they liked well your

look, your carving to Madonna, your drinking to her, and your playing under the table. Ask Mason, ask Blage, (Bowes is dead,) ask Wolf, that was my steward; they can tell how the gentleman marked it, and talked of it. It was a play to them, the keeping of your bottles that no man might drink of but yourself; and "That the little fat priest were a jolly morsel for the Signora." This was their talk; it is not my device. Ask other, whether I do lie.

Mr. Bell's volume may be recommended to those who want a neat, cheap, and sufficient edition of a writer in verse to whom English poetry is indebted, and who as such must always occupy a place in English literature. The foot-notes are brief, but enough for the reader's purpose; and Mr. Bell pleasantly brings together the particulars of Wyatt's life, and discusses them sensibly, availling himself of Mr. Bruce's publication in the *Gentleman's Magazine* of papers relating to the family, as well as of Wyatt's despatches in the State Paper Office.

**HEATHEN NOTION OF BAPTISM.**—One day a savage maiden being dead after she had been baptized, and the mother happening to see one of her slaves at the point of death also, she said, my daughter is gone alone into the Country of the Dead among the *Europeans*, without relations, and without friends. Lo now it spring-time, she must therefore sow Indian corn and Gourds. "Baptize my slave," added she, "before she dies, that she may go also into that country whither the souls of the *Europeans* after their death go, to the end he may serve my daughter there."—LOUIS HENNIPIN, *Missionary*.

**THE WORDLING'S MOTTO.**—*"It is good to be sure!"*—There is a tale of a covetous man that had nothing in his mouth, but, *It is good to be sure!* If his servant went to sow his land, he would follow him: Why? *O, it is good to be sure!* Though himself had lockt the doore, yet he must needs rise out of his bed in the cold, to feele it fast: Why? *O, it is good to be sure!* It came to passe that he felle very dangerously sick; and his servant perceiving little hope of life in him, asked him, Master, have you said your prayers? Yes, I have said them. Nay, but say them againe, Master; you know *It is good to be sure!* No, sayes the worldling, it is more than needs, for I am sure enough of that. Hee bids his servant open his chest, and bring him all his gold in it, to looke upon. The honest servant willing to worke his master to repentence, having opened it, told him, Master, the Devil is in the chest, he layes his paw upon all the gold, and sayes it is all his; because it was extracted out of the life-blood of widows, orphans, and poore wretches. Sayes he so, quoth the Extortioner: Then bring me the gold, the chest, the devil and all; *It is good to be sure!* Perhaps from hence comes that bye-word; that the covetous worldling gets the devil and all.—THOMAS ADAMS's *Commentary on the Second Epistle General of St. Peter*, p. 218.





Baron S. Bussiere

*Dragging the Communards to Execution*

